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# Reinventing Business Collaborations for Hawai‘i Career Academies: A Delphi Study

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This is to certify that the doctoral dissertation by

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Walden University
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Abstracts

# Reinventing Business Collaborations for Hawai‘i Career Academies: A Delphi Study

by

Jennifer A. Slotter Clawson

MA, University of Phoenix, 2008

BS, Kutztown University, 2005

Proposal Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Education

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July, 2022

## Abstract

Many Hawai‘i high schools have adopted the career academy model to meet the innovative goals set by the state’s department and board of education. Few guidelines exist for implementing this model in a new and unique setting. In the literature, the most predominant component across successful career academies was high-quality business collaborations. However, no research was found that examined how business collaborations are implemented in Hawai‘i schools, nor studies that reinvent the business collaboration component to develop variations for a specific location. The purpose of this qualitative Delphi study was to develop possible variations of the business collaboration component found in successful career academies that meet the needs of Hawai‘i’s career academies. This study used Rogers’ diffusion of innovations theory and the concerns-based adoption model as the conceptual framework. The focus of the research questions was developing possible variations of the business collaboration component by identifying the key features of the component, then forming ideal, acceptable, and unacceptable variations of each key feature. Following the qualitative Delphi process, Hawai‘i career academy stakeholders developed 20 innovation configuration maps containing 242 behavioral variations aligned by 83 overarching concepts via an online questionnaire platform. Data analysis occurred using thematic coding and Thurstone scaling. Findings from this study could cause social change because the variations of the business collaboration component may result in increased adoption rates and sustainability of the business collaboration innovation in Hawai‘i career academies.

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# Dedication

My work is dedicated to individuals who have supported me in my education journey. My Pop Pop, William August Slotter, and Grandpap, Edward Malacholsky, who believed so thoroughly in the power and freedom that a quality education could provide, that they helped make my higher education journey possible from the beyond. My husband, Clint Clawson, who endures the taking up of many household obligations so that I could work on this degree, never fails to believe in me when I do not, holds me through the tears and cheers, and continuously tells me that I will change the world through my work. To my parents, without whom none of this would be possible, on so very many levels. I am truly blessed to have had my parents as my earliest inspiration in life. My father, Bill Slotter, who showed me the value of working hard, gifted me my analytical mind, sense of duty to social justice, and goofy personality. My mother, Mary Slotter, who inspired me to become a teacher, reminded me that I dictate the quality of life I live, has never failed to answer the phone when I call, and reminds me to balance my life out with fun. My step daughter, Delaney Call, who inspirers me to be the best me. Finally, to my besties that supported me in so many ways, Kelly Barnes, Kaite VanHouten, and Johno Clayton. You are all the giants on whose shoulders I stand.

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# Chapter 1: Introduction to the Study

## Introduction

In the 2017–2020 Hawai‘i state department of education (HSDOE) and Hawai‘i state board of education (HSBOE) joint strategic plan, two public education goals were presented: (a) business collaborations: establishing collaborative relationships between businesses and schools, and (b) career pathways: a series of courses aligned to current industry skills and knowledge (HSDOE, 2016; HSBOE, 2016). These goals were presented as innovations to renovate a public school system that has a significant gap between actual and desired performance (American College Testing [ACT], 2017, 2019; Strive HI, 2021). Many public high schools in Hawai‘i recently adopted the career academy model to embrace the goals presented in the joint strategic plan.

Both career pathways and business collaborations are components found in career academy model schools (Fletcher et al., 2018; Fletcher & Tyson, 2017; Hackmann et al., 2018; Hernández-Gantes et al., 2018; Kasza & Slater, 2017; Lanford & Maruco, 2018; Malin & Hackmann, 2017, 2019; Schulte et al., 2017). The career academy model is also linked to increases in many measurements of student achievement (Clearinghouse, 2015; Fletcher et al., 2018; Hackmann et al., 2019; Hemelt et al., 2019; Kemple & Willner, 2008; Lanford & Maruco, 2018; Malin et al., 2020; NCAC, 2019; Sun & Spinney, 2017). However, few guidelines exist for implementing this innovative model in new settings. Hawai‘i career academies have unique needs due to the remote location of the islands and the diversity of the student population. The specific needs of an organization can be met by developing variations of an innovation’s key components (Hall & Loucks, 1978; Loucks, 1983; Rice & Rogers, 1980; Rogers, 2003).

In the literature, the most predominant component found across successful career academies is high-quality business collaborations (Fletcher & Tyson, 2017; Fletcher et al., 2018; Hackmann et al., 2018, 2019; Hernández-Gantes et al., 2018; Kasza & Slater, 2017; Lanford & Maruco, 2018, 2019; Malin et al., 2020; Malin & Hackmann, 2017, 2019; Sun & Spinney, 2017). Several academy model researchers state that quality business collaborations are fundamental to the success of a career academy model school (Fletcher & Tyson, 2017; Hackmann et al., 2018, 2019; Kasza & Slater, 2017; Lanford & Maruco, 2018; Malin et al., 2020; Malin & Hackmann, 2017, 2019). The problem is that current educational research does not provide Hawai‘i's career academies with variations of the business collaboration component to fit their unique needs and settings. Further research is needed for Hawai‘i career academies to develop variations of the business collaboration component. This study could fill the gap in the literature regarding possible variations of the business collaboration component for Hawai‘i’s career academies.

The purpose of this qualitative Delphi study was to develop possible variations of the business collaboration component that meet the needs of Hawai‘i’s career academies. The variations could be used to ease and accelerate implementation of the business collaboration component (Hall & Loucks, 1978; Loucks, 1983; Rice & Rogers, 1980; Rogers, 2003). The two diffusion theories that I used in this study were Rogers’s (2003) diffusion of innovation theory and the concerns-based adoption model (CBAM) by Hall and Hord (1984). Creating innovations variations to meet the needs of a location and clientele is part of Rogers’s (2003) innovation-decision process in organizations and the innovation configuration (IC) map portion of the CBAM’s (Hall & Hord, 1984; Hall & Loucks, 1978; Loucks, 1983; Rice & Rogers, 1980). Each of these diffusion theories

show that faster adoption rates and increased sustainability will occur when an innovation is reinvented to produce variations that meet the needs of a specific organization. In the absence of the IC map, Rogers (2003) did not propose a strategy for creating these variations. The IC map strategy is a collaborative process that can be used to create innovation variations that meet the needs of a specific location and clientele. The IC mapping process is used to deconstruct an innovation into its key features. Then, variations of each key feature are created by stakeholders to meet the needs of a specific location and clientele (Hall & Hord, 1984; Hall & Loucks, 1978; Loucks, 1983). The IC map strategy that I used in this study may be significant to the field of education because it could be a method for developing variations of career academy components that meet the specific needs of any school.

Included in this chapter is more information about business collaborations and the career academy model. I also discuss the problem that prompted this study and its purpose, the conceptual framework that frames and grounds the study, and the research questions that drove data collection. The chapter also includes an overview of the research methodology, including scope and delimitations, assumptions, and limitations. The chapter closes with a discussion of the significance of the study.

## Background

Current career academy research associates the model with positive impacts on many measurements of student success including increased academic achievement, the development of 21st-century skills, and increased post-secondary preparedness (Clearinghouse, 2015; Fletcher et al., 2018; Hackmann et al., 2019; Hemelt et al., 2019; Kemple & Willner, 2008; Lanford & Maruco, 2018; Malin et al., 2020; NCAC, 2019;

Sun & Spinney, 2017). Hawai‘i schools need the social change of the career academy model to close the performance gap between actual and desired student achievement (ACT, 2017, 2019; Strive HI, 2018, 2021). In 2019, ACT reported Hawai‘i students scoring 9% to 13% below the national average on all reported academic areas. Since 2016, approximately 50% of students in Hawai‘i failed to reach proficiency in all areas reported on the states' Smarter Balanced Assessment (Strive HI, 2018, 2021). Yet over 80% of Hawai‘i high school students were graduating on time with a traditional high school diploma (Strive HI, 2018, 2021). These figures indicate a gap between the skills and knowledge required to graduate from a Hawai‘i public high school and those required to succeed in a post-secondary education setting.

In response to the above performance gaps, the HSDOE and HSBOE presented innovative programs and strategies to improve student achievement across Hawai‘i public schools in the 2017–2020 joint strategic plan (HSDOE & HSBOE, 2016). One of the proposed programs was "career readiness pathways" (HSDOE & HSBOE, 2016, p. 11). The joint strategic plan introduced the goal of Hawai‘i education agencies collaborating with businesses and post-secondary institutions to develop these career pathway learning scenarios. According to the strategic plan, the business collaborations will ensure that the knowledge and skills presented in career and technical education (CTE) courses and career pathways align with current industry standards (HSDOE & HSBOE, 2016). In response to these plans, roughly half of all public high schools on O‘ahu transitioned to the career academy model by 2017.

The career academy model first emerged in the United States public school system 5 decades ago and slowly spread to schools around the nation (Clearinghouse,

2015; Kemple & Willner, 2008; NCAC, 2019). At the turn of the 21st-century the model became popular after research emerged associating career academies with increased student success (Clearinghouse, 2015; Kemple & Willner, 2008). The goals and scope of the career academy model have fluctuated over the last 4 decades, shifting to meet changing political and educational climates (NCAC, 2019; Hemelt et al., 2019). The current archetype of the career academy setting stems from three fundamental criteria that define and separate the model from the traditional high school setting.

All career academies must: (a) be small learning communities, (b) have a rigorous curriculum themed to current industry needs, and (c) collaborate with local employers, colleges, and communities to supply work-based learning opportunities (Clearinghouse, 2015; Fletcher et al., 2018; Hernández-Gantes et al., 2018; Kasza & Slater, 2017; Kemple & Willner, 2008; Malin & Hackmann, 2017, 2019; NCAC, 2019; Sun & Spinney, 2017). The intent of implementing these fundamentals is to increase student motivation and engagement by linking classroom learning to a career that piques student interest (Fletcher et al., 2018; Fletcher & Tyson, 2017; Hemelt et al., 2019; Hernández-Gantes et al., 2018; Kasza & Slater, 2017; Lanford & Maruco, 2018; Malin et al., 2020; Malin & Hackmann, 2017). Reconfiguring an entire school into career pathway oriented, small learning communities with rigorous CTE courses prompts an environment rich in interdisciplinary, personalized, real-world learning experiences (Fletcher & Tyson, 2017; Kasza & Slater, 2017; Kemple & Willner, 2008; Malin et al., 2020; Malin & Hackmann, 2017, 2019; Sun & Spinney, 2017). Mastery of skills such as creativity, integrity, critical thinking, and self-management is essential for upper-tier employment positions of the 21st-century (Fletcher & Tyson, 2017; Fletcher et al., 2018; Kasza & Slater, 2017). The

typical high school graduate is not equipped with the skills and knowledge to succeed in the skills-rich, post-secondary world (Alliance for Excellent Education [AEE], 2017; Fletcher & Tyson, 2017; Hackmann et al., 2018; Stone, 2017). The career academy model may be a solution to addressing this knowledge and skills deficit.

Literature examining successful career academies exposed five components found in successful career academy model schools. Forming successful business collaborations is vital to each of the components (Fletcher et al., 2018; Fletcher & Tyson, 2017; Hackmann et al., 2018, 2019; Hernández-Gantes et al., 2018; Lanford & Maruco, 2018; Malin et al., 2020; Malin & Hackmann, 2017, 2019). Table 1 summarizes the business partnership role in each component.

**Table 1**

*Business Collaboration Connection to Successful Career Academy Components*

| Career academy component | Business collaboration connection |
|---|---|
| Cross-sector partnerships (Fletcher et al., 2018; Fletcher & Tyson, 2017; Hackmann et al., 2018; Hernández-Gantes et al., 2018; Lanford & Maruco, 2018; Malin & Hackmann, 2017, 2019; Sun & Spinney, 2017). | Business collaborations are one type of cross-sector partnerships (Malin & Hackmann, 2019). These business partnerships should provide industry-based input and actions to implement for the four components listed below (Fletcher et al., 2018; Fletcher & Tyson, 2017; Hackmann et al., 2018, 2019; Hernández-Gantes et al., 2018; Kasza & Slater, 2017; Lanford & Maruco, 2018; Malin et al., 2020; Malin & Hackmann, 2017, 2019). |
| Collaboratively creating a shared vision for the school (Fletcher et al., 2018; Fletcher & Tyson, 2017; Hackmann et al., 2018, 2019; Hernández-Gantes et al., 2018; Lanford & Maruco, 2018; Malin et al., 2020; Malin & Hackmann, 2017, 2019). | Business partners should be involved in the career academy's vision development process to ensure the incorporation of skills and knowledge that correlates with current industry standards (Fletcher et al., 2018; Fletcher & Tyson, 2017; Hackmann et al., 2018, 2019; Hernández-Gantes et al., 2018; Lanford & Maruco, 2018; Malin et al., 2020; Malin & Hackmann, 2017, 2019). |
| Rigorous curriculum themed to industry needs (Fletcher et al., 2018; Fletcher & Tyson, 2017; Hackmann et al., 2018; Hernández-Gantes et al., 2018; Kasza & Slater, 2017; Lanford & Maruco, 2018; Malin & Hackmann, 2017, 2019; Sun & Spinney, 2017). | Business partners help develop and implement work-based learning opportunities for both teachers and students (Fletcher et al., 2018; Fletcher & Tyson, 2017; Hackmann et al., 2018; Hernández-Gantes et al., 2018; Kasza & Slater, 2017; Lanford & Maruco, 2018; Malin & Hackmann, 2017, 2019). Business partners also take an active role in developing and implementing industry-relevant curriculum that prepares student with the post-secondary skills and knowledge they need to succeed after high school (Fletcher et al., 2018; Fletcher & Tyson, 2017; Hackmann et al., 2018; Hernández-Gantes et al., 2018; Kasza & Slater, 2017; Malin & Hackmann, 2019). |
| Diverse leadership opportunities (Fletcher et al., 2018; Hackmann et al., 2018; Hernández-Gantes et al., 2018; Kasza & Slater, 2017; Malin et al., 2020; Malin & Hackmann, 2017, 2019). | Business partners should be advisory board members and partake in academy-based leadership decisions (Fletcher et al., 2018; Hackmann et al., 2018; Hernández-Gantes et al., 2018; Kasza & Slater, 2017; Malin et al., 2020; Malin & Hackmann, 2017, 2019; Sun & Spinney, 2017). |
| Data-driven decisions (Fletcher et al., 2018; Hackmann et al., 2019; Kasza & Slater, 2017; Malin & Hackmann, 2019; Sun & Spinney, 2017). | Business partners can provide current employment data (Hackmann et al., 2019; Malin & Hackmann, 2019), skills and knowledge articulation feedback (Fletcher et al., 2018; Hackmann et al., 2018; Kasza & Slater, 2017), and help monitor internship progress through data collection (Fletcher et al., 2018). |

Due to the recent expansion of the career academy model in Hawai‘i, there is a need to address how the variations of the business collaboration component will be integrated into Hawai‘i’s career academies. Previous researchers have no examined business collaboration implementation in Hawai‘i career academies, nor studies that develop variations of the business collaboration component to meet the needs of a specific location. Findings from this study could be used for social change because the variations of the business collaboration component may result in increased adoption rates and sustainability of the business collaboration innovation in Hawai‘i career academies (Hall & Loucks, 1978; Loucks, 1983; Rice & Rogers, 1980; Rogers, 2003). The IC map strategy that I used in this study may be significant to the field of education because it could a method for developing variations of career academy components that meet the specific needs of any school.

## Problem Statement

The problem is that current educational research does not provide Hawai‘i's career academies with variations of the business collaboration component to fit their unique needs and setting. The majority of current career academy model researchers focuses on two aspects: (a) measuring student achievement in career academies, or (b) determining what components are found across successful career academy model schools. In the literature, the most predominant component found across successful career academies is high-quality business collaborations (Fletcher et al., 2018; Fletcher & Tyson, 2017; Hackmann et al., 2018, 2019; Hernández-Gantes et al., 2018; Kasza & Slater, 2017; Lanford & Maruco, 2018, 2019; Malin et al., 2020; Malin & Hackmann, 2017, 2019; Sun & Spinney, 2017). Several academy model researchers state that quality business

collaborations are fundamental to the success of a career academy model school (Fletcher & Tyson, 2017; Hackmann et al., 2018, 2019; Kasza & Slater, 2017; Lanford & Maruco, 2018; Malin et al., 2020; Malin & Hackmann, 2017, 2019). However, limited research exists concerning the establishment of business collaborations in high schools. There is no extant literature regarding the development of variations of the business collaboration component to meet the unique needs of a specific location and clientele, such as Hawai‘i career academies. This problem needs to be addressed so that Hawai‘i career academies can properly implement the business collaboration component. I addressed this gap in the literature by developing possible variations of the business collaboration component for Hawai‘i’s career academies.

## Purpose of the Study

The purpose of this qualitative Delphi study was to develop possible variations of the business collaboration component found in successful career academies that meet the needs of Hawai‘i’s career academies. A combination of Hawai‘i career academy teachers, school leaders, and business partners formed the expert group for this Delphi study. I used the IC mapping strategy as the framework and tool to build these variations. IC mapping is a strategy that is used to deconstruct an innovation into its key features. Then, variations of each key feature are created by stakeholders to meet the needs of a specific location and clientele (Hall & Hord, 1984; Hall & Loucks, 1978; Loucks, 1983). The variations should increase and sustain adoption rates of the business collaboration component in Hawai‘i career academies (Hall & Hord, 1984; Hall & Loucks, 1978; Loucks, 1983; Rice & Rogers, 1980; Rogers, 2003). This study is innovative because I applied the IC mapping strategy to the business collaboration component found in

successful career academies. Chapter 3 contains a detailed description of the research methodology.

## Research Questions

The following research question and subquestions were developed to create variations of the business collaboration component for Hawai‘i career academies using an IC map.

RQ 1. What possible variations of the business collaboration component found in successful career academies will Hawai‘i career academy stakeholders develop to meet their specific needs?

RQ 1a. What key features of the business collaboration component will Hawai‘i career academy stakeholders develop to build variations that meet their specific needs?

RQ 1b. What behavioral variations will Hawai‘i career academy stakeholders develop to support implementation of business collaboration key features?

## Conceptual Framework for the Study

The conceptual framework for this study was founded on diffusion theories that state increased sustainability and adoption rates will occur when an innovation is reinvented to provide variations that meet the needs of a location and clientele (Hall & Hord, 1984; Hall & Loucks, 1978; Loucks, 1983; Rice & Rogers, 1980; Rogers, 2003). I used Rogers’s (2003) diffusion of innovations theory and by Hall and Hord’s (1984) CBAM as the foundation for this study. Forming variations of an innovation to meet the needs of a location and clientele is addressed in Rogers’s innovation-decision process in organizations and the CBAM’s IC map portion (Hall & Loucks, 1978; Loucks, 1983; Rice & Rogers, 1980; Rogers, 2003). Rogers’s organization approach is used to

encourage and promote the reinvention of an innovation to increase both adoption rates and sustainability (Rice & Rogers, 1980; Rogers, 2003). However, Rogers does not supply a method for developing the variations. The second part of the framework, the IC map portion of the CBAM, is used to address these limitations. Connections between the key elements of the framework will be addressed more thoroughly in Chapter 2.

Three foundational tenets supporting the development of innovation variations emerge when both Rogers's (2003) and Hall and Hord's (1984) diffusion theories are combined. The first tenet states that deconstructing an innovation into its key features is fundamental to successful implementation in a school or organization setting (Hall & Hord, 1984; Hall & Loucks, 1978; Loucks, 1983; Rice & Rogers, 1980; Rogers, 2003). This is followed by the premise that stakeholders must reinvent the key features of the innovation by creating variations that fit the needs of the school or organization (Hall & Hord, 1984; Rogers, 2003). The third foundational tenet states that stakeholder groups must clearly communicate their vision for innovation implementation by forming a consensus on which innovation variations are acceptable for use in the organization (Hall & Hord, 1984; Rogers, 2003). In this study, Hawai‘i high schools were the organization and Hawai‘i career academy teachers, school leaders, and business partners made up the stakeholder groups.

## Nature of the Study

The nature of this study was qualitative using the Delphi method. I applied the Delphi method to the IC mapping strategy to develop variations of the business collaboration component for the career academies of Hawai‘i. The Delphi method is a communication strategy designed to work a group of experts toward a reliable consensus

that is devoid of negative group influences (Brady, 2015; Dalkey & Helmer, 1963; Habibi et al., 2014; Kosloski & Ritz, 2016; Mohr & Shelton, 2017; Omer Attali & Yemini, 2017; Rose et al., 2015; Sekayi & Kennedy, 2017). A reliable consensus reached by Hawai‘i career academy teachers, school leaders, and business partners determined the variations that formed each section of the IC maps. Because of the consensus feature of the qualitative Delphi process, the research method was aligned with the third foundational tenant of the theoretical framework. The Delphi method is also an appropriate strategy for developing program variations (Hsu and Sandford as cited in Greason, 2018).

I used an online questionnaire platform to develop the Delphi instrument and gather data for the IC map. I deployed the Delphi instrument in three phases of data collection consisting of three rounds each. I modeled the data collection rounds for each phase using Sekayi and Kennedy's (2017) qualitative Delphi process. In Round 1, I gathered initial responses to an open-ended brainstorming question using the Delphi instrument and thematically coded. In Round 2, I distributed the summarized responses back to each participant for approval or adjustments. In Round 3, I employed Thurstone scaling as a system to qualitatively rank responses. I used the multiple rounds and phases to reach a reliable consensus on IC map components. Once a consensus was reached, I populated the themes in the IC maps, creating the variations of the business collaboration component found in successful career academies. The variations derived in the IC maps are consistent with Rogers's (2003) innovation-decision process in organizations portion of his diffusion of innovations theory.

## Definitions

*Business collaborations*: Malin and Hackmann (2017) cited Taylor et al. (2009) to define business partnerships as "...meaningful partnerships [that] promote effective transitions across educational levels and/or to the student's chosen career" (p. 55). In this study, this may be interpreted as business partners taking an active role in many aspects of student learning, such as helping develop curriculum, participating as advisory board members, providing internship opportunities, and more.

*Business partner*: Malin and Hackman defined business partners as individuals who

> beyond school boundaries, [form] a complex leadership network ..., with civic and business leaders serving as key actors, who leveraged their social and political capital to expand school-business partnerships, protect the reform against threats, and advocate for continuing reforms in support of students' [college and career readiness] CCR preparation (Malin & Hackmann, 2019, p.216).

In this study, this may be interpreted as local business employees or owners working in partnership with a school to help students become career-ready.

*Career pathway*: "...a series of connected education and training programs and student support services enabling individuals to secure a job or advance in a demand industry or occupation" (Oregon.gov, n.d.). In this study, this may be interpreted as a progressive series of CTE courses aligned to a specific career field.

*Component*: Hall and Hord (1984) defined a component as the "building block of the innovation" (p 117). In this study, component is used in conjunction with the term

business collaborations indicating that business collaborations are the building block of the career academy model innovation.

*Cross-sector collaboration*: Hackmann et al. (2019) quoted Bryson et al. (2006, p 44) to define cross-sector collaboration as "the linking or sharing of information, resources, activities, and capabilities by organizations in two or more sectors to achieve jointly an outcome that could not be achieved by organizations in one sector separately." This may be interpreted as any collaboration occurring between secondary schools and businesses or post-secondary organizations in this study.

*Diffusion:* Rogers (2003) described diffusion as "the process by which an innovation is communicated through certain channels over time among the members of a social system" (p 35). In this study, the innovation is the business collaboration component, and the social system is Hawai‘i career academies.

*Hawai‘i career academy stakeholders:* In this study, stakeholders refer to Hawai‘i career academy teachers, school leaders, and business partners.

*Innovation*: Rogers (2003) defined an innovation as "an idea, practice, or object that is perceived as new by an individual or other unit of adoption" (p 12). The specific innovation in this study is the business collaboration component found in successful career academy model schools.

*Organization*: Rogers (2003) defined an organization as *"*…a stable system of individuals who work together to achieve common goals through a hierarchy of ranks and division of labor" (p 404). The organization in this study is Hawai‘i career academies.

*Performance gap*: Rogers (2003) defines performance gap as"…the discrepancy between an organization's expectations and its actual performance" (p 422). The

performance gap identified in this study is the discrepancy between actual and intended student success in Hawai‘i public high schools.

*Rate of adoption:* "...the relative speed with which an innovation is adopted by members of a social system" (Rogers, 2003, p 23). The innovation that I examined in this study was the business collaboration component found in successful career academy model schools.

*Reinvention*: *"*…the degree to which an innovation is changed or modified by a user in the process of its adoption and implementation" (Rogers, 2003, p 180). In this study, reinvention may be interpreted as the process by which variations of an innovation are created.

*Social system*: "…a set of interrelated units that are engaged in joint problem solving to accomplish a common goal" (Rogers, 2003, p 23). In this study, a social system may be interpreted as employees of the Hawai‘i DOE, BOE, and business partners that are working toward successful career academy model implementation.

*Stakeholder*: "One who is involved in or affected by a course of action" (Merriam-Webster, 2019). In this study, a stakeholder is defined as a Hawai‘i career academy teacher, school leader, or business partner.

*Sustainability*: "…the degree to which an innovation continues to be used after initial efforts to secure adoption is completed" (Rogers, 2003, p 429). In this study, sustainability is interpreted as the degree to which Hawai‘i career academy stakeholders will use the business collaboration innovation after adoption.

## Assumptions

This Delphi study was conducted with several assumptions. First, the Hawai‘i career academy stakeholders that were selected for this study met the selection criteria. Therefore, I assumed they desired to improve student achievement through business collaborations and the career academy model. The second assumption was that all participants responded to the Delphi instrument prompts with honesty, based on their personal experiences, knowledge, and to the best of their ability. The final assumption was that Hawai‘i career academy model schools support the integration of business collaborations in the classroom. Acknowledging these assumptions helped subvert their influence on conclusions drawn from data collected in this study.

## Scope and Delimitations

The focus of this study was reinventing the business collaboration component to meet the needs of Hawai‘i’s career academies by applying the qualitative Delphi method to the IC mapping process. The findings from this study may result in increased adoption rates and sustainability of the business collaboration innovation in Hawai‘i career academies. For the purpose of this study, the geographical location was restricted to the Hawaiian Islands. Participation was delimited to experts who met the following inclusion criteria. Teachers were required to have at least two years of experience implementing work-based learning in their classroom at a Hawai‘i career academy or high school. School leaders were required to have a minimum of two years of experience at a Hawai‘i career academy or school that recently transitioned to the career academy model. Business partners were required to have two years of experience as a business collaborator with a Hawai‘i high school or as an academy advisory board member.

Hawai‘i career academy students could have provided valuable insights into the study. However, students were excluded from this study due to the complications surrounding participants under the age of 18.

While his study was designed to develop variations specifically for Hawai‘i career academies, the research design and data collection process may have elements of transferability. Using the qualitative Delphi method to crate an IC map is a strategy that might be applied in a variety of other contexts. The IC map strategy that I used in this study could be a method for developing variations of career academy components that meet the specific needs of any school. The research design might also be replecated to create variations of other career academy components for Hawai‘i career academies. Alternate conceptual frameworks were considered for this study, including social learning theory, cognitive learning theory, and pragmatism. While each of these theories may be appropriate for studies examining the learning scenarios that occur in career academy model schools, none focus on reinvention of an innovation.

## Limitations

While the strategy applied in this study may be applied to reinventing business collaborations in other states, the variations created in this study may not transfer to other locations due to the specific circumstances and populations of Hawai‘i career academies. Schools on the continental United States are not included in this study. Neither are elementary or post-secondary schools, nor Hawai‘i high schools that are not career academy model schools. These settings were omitted from this study as the central phenomenon on which I focused this study was developing variations of the business collaboration component to meet the needs of Hawai‘i’s career academies.

The primary limitations of this study were sample size and participant attrition. The ideal sample size for this study was 15 participants, five from each of the three stakeholder groups; Hawai‘i career academy teachers, school leaders, and business partners. Though participant size for Delphi studies is debatable, ranging anywhere from seven to 30 participants (Rowe & Wright, 2001; Clayton, 1997 as cited by Omer Attali & Yemini, 2017), 15 participants is still a relatively small sample size given the potential pool of participants.

Participant attrition is a concern in Delphi studies (Brady, 2015; Mohr & Shelton, 2017). For these reasons, the data collection phases and rounds are restricted to three each. However, full participation in all rounds of data collection by all participants did not occur in this study. According to Buck et al. (1993), this lack of full participation adversely affects trustworthiness. The COVID-19 pandemic exacerbated participant-related limitations. The COVID-19 pandemic extended the data collection timeline of this study and may have also affected participant recruitment and contributions. Patton’s (2015) constant comparison strategy of revisiting data multiple times to check for coding continuity will also be applied to decrease bias.

## Significance of the Study

Increased understanding of this topic could fill the gap in the literature by developing possible variations of the business collaboration component for Hawai‘i’s career academies. Successful business collaborations in career academy model schools have the potential to innovate the public education setting. Limited research exists which presents possible implementation strategies for this teaching and learning innovation. What is known about business collaborations is that they are fundamental to the success

of a career academy model school (Fletcher & Tyson, 2017; Hackmann et al., 2018, 2019; Kasza & Slater, 2017; Lanford & Maruco, 2018; Malin et al., 2020; Malin & Hackmann, 2017, 2019). Neither the Hawai‘i state education agencies nor current educational research has provided Hawai‘i's career academies with strategies for implementing business collaborations or the career academy model.

The IC map strategy I used in this study may be significant to the field of education because it could be a method for developing variations of career academy components that meet the specific needs of any school. Career academy stakeholders may also apply the IC development process as a strategy for developing variations of future innovations for Hawai‘i high schools. Reinventing an innovation by developing variations should increase and sustain adoption rates (Hall & Hord, 1984; Hall & Loucks, 1978; Loucks, 1983; Rice & Rogers, 1980; Rogers, 2003).

Findings from this study could cause social change because the variations of the business collaboration component may result in increased adoption rates and sustainability of the business collaboration innovation in Hawai‘i career academies. State, complex, and school-level leaders, along with classroom teachers, may be able to use the business collaboration component variations to support career academy model implementation in high schools across the Hawaiian Islands. The career academy model positively impacts many measurements of student success including increased academic achievement, the development of 21st-century skills, and increased post-secondary preparedness (Clearinghouse, 2015; Fletcher et al., 2018; Hackmann et al., 2019; Hemelt et al., 2019; Kemple & Willner, 2008; Lanford & Maruco, 2018; Malin et al., 2020; NCAC, 2019; Sun & Spinney, 2017). These increases in student success could also occur

in Hawai‘i career academy schools with successful and sustained implementation of the business collaboration component.

## Summary

The purpose of this qualitative Delphi study was to develop possible variations of the business collaboration component found in successful career academies that meet the needs of Hawai‘i’s career academies. The conceptual framework for this study was founded on diffusion theories that state increased sustainability and adoption rates will occur when an innovation is reinvented to provide variations that meet the needs of a location and clientele (Hall & Hord, 1984; Hall & Loucks, 1978; Loucks, 1983; Rice & Rogers, 1980; Rogers, 2003). The two diffusion theories merged to form this framework were Rogers’s (2003) diffusion of innovations theory and the concerns-based adoption model (CBAM) by Hall and Loucks (1978).

The Delphi method was applied to the IC mapping strategy to develop variations of the business collaboration component for the career academies of Hawai‘i. Hawai‘i career academy teachers, school leaders, and business partners formed the expert group required to complete the Delphi process. The data collection tool for this study was an online Delphi instrument. The research questions for this study align with the Delphi method adapted for qualitative use. The connection between the framework theories, business collaborations, career academies, and the need for change in the Hawai‘i public school system will be addressed in the next chapter.

# Chapter 2: Literature Review

## Introduction

This chapter includes a review of the literature and conceptual frameworks that support the problem, purpose, research questions, and methodology of this study. The problem was that current educational research does not provide Hawai‘i's career academies with variations of successful career academy components to fit their unique needs and settings. The purpose of this qualitative Delphi study was to develop possible variations of the business collaboration component found in successful career academies that meet the needs of Hawai‘i’s career academies. The career academy model positively impacts many measurements of student success including increased academic achievement, the development of 21st-century skills, and increased post-secondary preparedness (Clearinghouse, 2015; Fletcher et al., 2018; Hackmann et al., 2019; Hemelt et al., 2019; Kemple & Willner, 2008; Lanford & Maruco, 2018; Malin et al., 2020; NCAC, 2019; Sun & Spinney, 2017). The business collaboration component is the foundation of successful career academy model schools (Fletcher et al., 2018; Fletcher & Tyson, 2017; Hackmann et al., 2018, 2019; Hernández-Gantes et al., 2018; Kasza & Slater, 2017; Lanford & Maruco, 2018, 2019; Malin et al., 2020; Malin & Hackmann, 2017, 2019). Hawai‘i schools need the social change of the career academy model to close the performance gap between actual and desired student achievement (ACT, 2017, 2019; Strive HI, 2021).

This chapter includes four sections. The first section is the literature search strategy, followed by the conceptual framework, then the literature review related to key concepts, and finally, the summary and conclusions.

## Literature Search Strategy

I included a wide variety of databases in the literature search to compile an exhaustive literature review of both print and digital peer-reviewed articles and materials from the last 5 years. The search was primarily conducted through Walden University's online Thoreau Library portal. Through this portal, the following databases were accessed: ERIC, Academic Search Complete, Business Source Complete, Education Source, PsycEXTRA, PsycINFO, SocINDEX with Full Text, and Teacher Reference Center. I also used Google Scholar an additional source to locate open access articles.

I used the following search terms to locate articles specific to business collaborations and the career academy model: *Career academies, academies*, *business collaborations*, *Nashville academies*, *school within a school*, *academy model, CTE*, *wall to wall, implement*, *practice*, *praxis*, *transition*, *career*, *future-ready learner, preparing students*, *career-ready learners*, *Ford next-generation learning framework, cross-sector collaboration, business collaboration, business partnership, school-business relationship, cooperative planning, career readiness, college readiness, cross-sector collaboration, educational leadership, and educational reform, small learning communities, career technology education*, and *career pathways*. I used the following keywords to identify studies and reports pertaining to Hawai‘i public high schools: *Hawai‘i, Mānoa, Honolulu, O‘ahu, Leeward, student achievement, performance, success, school achievement, school report*. Variations of these terms included and excluded Hawaiian language-specific diacritical markings, such as the kahakō and ‘okina, during searches. The previous terms were used in conjunction with the following terms: *high school, secondary education, junior high, middle school, secondary school.* I

also used the keywords to search terms related to the conceptual framework of this study: *Rogers diffusion of innovations, diffusion theory, diffusion, concerns-based adoption model, CBAM*, *innovation configurations, IC map, reinvention,* and *innovation in schools.* Variations of all terms listed above for each literature review sections were used to ensure exhaustive search results.

## Conceptual Framework

The conceptual framework for this study is founded on diffusion theories that state increased sustainability and adoption rates will occur when an innovation is reinvented to provide variations that meet the needs of a location and clientele (Hall & Hord, 1984; Hall & Loucks, 1978; Loucks, 1983; Rice & Rogers, 1980; Rogers, 2003). Diffusion theory is primarily applied as a forecasting model for the pattern and rate at which an idea or innovation is adopted through a social group or into an organization (Acosta & Acosta, 2017; Rogers, 2003; van Oorschot et al., 2018). The two diffusion theories I merged to form this framework were Rogers's (2003) diffusion of innovations theory and the concerns-based adoption model (CBAM) by Hall and Hord (1984). Rogers's (2003) innovation-decision process in organizations is the first part of the framework. Rogers's organization approach encourages and promotes the reinvention of an innovation to increase both adoption rates and sustainability (Rice & Rogers, 1980; Rogers, 2003). Limitations of Rogers's process include the lack of a strategy and tool for determining which variations are acceptable or unacceptable. The second part of the framework, the IC map portion of the CBAM, negates these limitations. I used the IC mapping strategy (Hall & Hord, 1984; Hall & Loucks, 1978; Loucks, 1983) to create and rank variations of an innovation with Hawai‘i career academy stakeholders.

Three foundational tenets supporting reinvention emerge when the two diffusion theories described above are combined. The first tenet states that deconstructing an innovation into its key features is fundamental to successful implementation in a school or organization setting (Hall & Hord, 1984; Hall & Loucks, 1978; Loucks, 1983; Rice & Rogers, 1980; Rogers, 2003). This is followed by the premise that stakeholders must adapt, or reinvent, the key features of the innovation to fit the needs of the school or organization (Hall & Hord, 1984; Rogers, 2003). Finally, stakeholder groups must clearly communicate their vision for innovation implementation by forming a consensus on which innovation variations are acceptable for use in the organization (Hall & Hord, 1984; Rogers, 2003). In this study, Hawai‘i high schools were the organization, and Hawai‘i career academy teachers, school leaders, and business partners formed the stakeholder group. Table 2 illustrates the alignment between the two diffusion theories and the foundational tenets of the conceptual framework. These tenets are supported below in a review of the literature.

**Table 2**

*Diffusion Theories and Framework Alignment*

| Innovation-decision process in organizations (Rice & Rogers, 1980; Rogers, 2003) | Stage in IC map creation (Hall & Hord, 1984; Hall & Loucks, 1978) | Description | Foundational tenets forming conceptual framework |
|---|---|---|---|
| 1. Agenda-setting and matching phases | 1. Identify and define components of an innovation. | 1. An innovation is deconstructed into key features or components. | 1. The process of identifying and defining key features of an innovation is fundamental to successful implementation of an innovation in an organization. |
| 2. Redefining/ restructuring | 2. Define variations of the key features. | 2. Innovation components are reinvented, or adapted, to meet the needs of the organization. The organization also adapts to meet the innovation. | 2. Stakeholders must adapt, or reinvent, the key features of the innovation to fit the needs of the organization and the organization adapts to the innovation. |
| 3. Clarifying | 3. Field test and scale the variations. | 3. Variations of the innovation are collaboratively examined to determine which will best meet the needs of the organization based on stakeholders' experiences. | 3. Stakeholder groups must clearly communicate their vision for innovation implementation by forming a consensus of which innovation variations are acceptable for use in the organization. |

## Rogers Diffusion of Innovations Theory

Rogers's (2003) diffusion of innovations theory states that reinvention can increase the adoption rates and sustainability of an innovation. Reinvention occurs in the innovation-decision process (Rogers, 2003). The innovation-decision process contains five phases through which an individual or organization progress from the initial need for or contact with, an innovation, through implementation, and beyond (Rogers, 2003).

Rogers developed his innovation-decision model by observing individuals in a social system as they interacted with an innovation. In this five-stage process, an individual's perception of the innovation determines its value (Acosta & Acosta, 2017; Rogers, 2003). The perceived value is then communicated, which spreads knowledge and sways others' opinions about adopting the innovation (Rogers, 2003). This line of communication also affects the rate at which an innovation is diffused though the social system (Acosta & Acosta, 2017; Rogers, 2003). In the fourth phase of the innovation-decision process, the innovation is implemented, and reinvention is considered (Rogers, 2003). For an individual in a social system, the innovation-decision process and degree of reinvention is a personal decision (Rogers, 2003). The personal nature of reinvention changes when the innovation-decision process is implemented in and organization. In an organization, the need for communal decision-making negates the personalization of the innovation-decision process.

### *Innovation-Decision Process in Organizations*

Diffusing an innovation through an organization is a complicated process but crucial to an organization's survival (Hazzan & Zelig, 2016; Rogers, 2003; van Oorschot et al., 2018). To describe this complexity, Rogers (2003) modified the innovation-decision process into five steps that occur in two broad phases. In an organization, reinvention is presented as a probability from the beginning of the innovation-decision process. In the first step, agenda-setting, perceived problems are identified and collectively prioritized by organization members (Rogers, 2003). Then, possible solutions are aligned or matched to these identified problems (Rice & Rogers, 1980; Rogers, 2003). Certain components of one innovation may present a suitable solution to only a single

part of the identified problem, while aspects of another innovation might complete the problem-solving process (Rice & Rogers, 1980). The matching process deconstructs an innovation into its components or key features (Rice & Rogers, 1980). Components that are seen as possible solutions may be considered for implementation. In this fundamental implementation step, reinvention is conceptualized. The next step, redefining/restructuring, is where reinvention is actualized. In this step, some organization members begin limited use of the innovation, and variations of the innovation emerge (Rogers, 2003). When the variations of an innovation begin organization-wide use, the clarifying stage begins (Rogers, 2003). The variations of the innovation created through reinvention then diffuse into wide-spread use in the organization (Rogers, 2003).

In the field of education, numerous researchers have applied Rogers's (2003) diffusion theory primarily to study technology adoption. Applying Rogers's organization innovation-decision process in a school setting is less common and presents unique research opportunities (Rogers, 2003; Vallett et al., 2014). Schools, like organizations, must innovate to remain competitive and undergo consistent evaluations of innovation-adoption decisions (Hazzan & Zelig, 2016). However, schools tend to adopt an innovation in a reactive maneuver instead of proactive action where businesses tend to innovate proactively (Hazzan & Zelig, 2016). Hazzan and Zelig (2016) concluded that schools can learn much about the innovation-adoption process by forming business collaborations.

### *Factors Affecting Reinvention of an Innovation*

Reinvention is a process that should be encouraged (Rice & Rogers, 1980). It results in both increased personal identity and ownership of an innovation, which leads to increased adoption rates and sustainability (Rice & Rogers, 1980; Rogers, 2003). Rogers (2003) observed that reinvention in an organization is reciprocal: both the organization and the innovation adapt to use in the environment. Many factors affect the degree to which an innovation and an organization are reinvented (Rice & Rogers, 1980; Rogers, 2003). The Hawai‘i state department of education (HSDOE) and Hawai‘i state board of education (HSBOE; 2016) joint strategic plan goals of business collaborations and career pathways encompass many of these reinvention factors. Table 3 summarizes these factors and aligns them to the business collaboration implementation-decision in Hawai‘i high schools. The HSDOE and HSBOE (2016) joint plan is discussed in greater detail in the Hawai‘i schools section of the literature review.

**Table 3**

*Factor Increasing the Need for Reinvention Applied to HSDOE & HSBOE Goals*

| Reinvention factor | Description of reinvention factor | Factor representation in joint strategic plan |
|---|---|---|
| Breadth and clarity of a problems' definition | Rogers defines this as the *width of problem definition.* Vague and broad problem definitions require more innovation reinvention (Rice & Rogers, 1980). | The Hawai'i strategic plan goal of increasing student success through business collaborations is very loosely defined problem with an even more generically stated innovation. |
| Source of innovation | An innovation developed inside an organization is more likely to garner acceptance and require less reinvention than one initiated from an external source (Rice & Rogers, 1980). | The business collaboration implementation goal in Hawai'i high schools came from educational agency, not by teachers or those tasked with implementation of the innovation. |
| Type of innovation | *Radical innovations* create high levels of doubt and hesitation in an organization while forcing members of an organization to work outside their normal roles (Rogers, 2003). These innovations can generate increased implementation resistance. | Transforming high schools in Hawai'i to the career academy model and implementing business collaborations to drive programs of study classifies as a radical innovation. |
| Role of leadership in communal decision-making process | The manner in which leadership presents an adoption-decision can affect adoption rates and sustainability (Hung et al., 2017; Rogers, 2003)<br><br>1. *Authority innovation-decisions*- implementation decisions made by a high-status individual in the social system and often the result in increased adoption rates, but decreased sustainability (Rogers, 2003).<br>2. *Optional innovation-decisions* are made by a single individual regardless of the group's decision. The result is faster adoption or rejection of decisions (Rogers, 2003).<br>3. *Collective innovation-decisions* unanimous decision made by all members of a social system to adopt or reject an innovation (Rogers, 2003). | The joint strategic plan goal of increasing career pathways and business collaborations in Hawai'i high schools can be viewed as an authoritative decision. Without reinvention, authoritative decisions often lead to reduced sustainability.<br><br>The decision to transition Hawai'i high schools into the career academy model differs from school to school. Some decisions were collective and other authoritative. |

Reinventing the business collaboration innovation in career academies presents a unique situation to apply diffusion theory. Schools present a situation where crossover in the social system occurs (Rogers, 2003). Teachers are employees in an organization, but also collectively participate in decisions concerning innovations (2003). Business partners are not employees in the organization but will be asked to participate in the decision-making process and take leadership roles (2003). Rogers states that collective and authority decisions are more common in the field of education than optimal decisions. Both teachers in positions of authority and administrators can make authoritative innovation decisions (2003).

Rogers (2003) offers suggestions to increase sustainability and reduce implementation resistance. One suggestion is to include a large number of an organization's members into multiple aspects of the decision process. Rogers called this *increasing participation.* Collaboratively reinventing the business collaboration component with multiple stakeholder groups meets many of the suggestions presented by Rogers to increase sustainability and implementation rates. In addition, collective decisions generally equate to increased sustainability. Using the Delphi method as the data collection method of this study supports collective decisions. In addition, Hung et al. (2015) recommend several practices to increase successful diffusion in an educational setting. Many of the recommended practices are common in career academy model schools that successfully implement business collaborations. Table 4 illustrates the connection between successful career academy components, how these components include business partnerships, and how business collaborations support successful diffusion in educational settings.

**Table 4**

*Connections Between Career Academy Components, Business Collaborations, and Diffusion in Education Settings*

| Career academy component | Business collaboration connection | Requirement for successful diffusion in education |
|---|---|---|
| Cross-sector partnerships. | Business collaborations are cross-sector partnerships. These business partnerships should provide industry-based input and actions to implement for the four components listed below. | School leaders must collaborate with intra-educational and external networks (Hung et al., 2015). |
| Collaboratively creating a shared vision for the school. | Business partners should be involved in the career academies vision development process to ensure the incorporation of skills and knowledge that correlates with current industry standards. | To increase sustainability and reduce implementation resistance, include a large number of an organization's stakeholders into multiple aspects of the decision process (Rogers, 2003). |
| Rigorous curriculum themed to industry needs. | Business partners help develop and implement work-based learning opportunities for both teachers and students. Business partners also take an active role in developing and implementing industry-relevant curriculum that prepares student with the post-secondary skills and knowledge they need to succeed after high school. | Teacher apprenticeships with business partners will strengthen professional development (Hung et al., 2015). |
| Diverse leadership opportunities. | Business partners should be advisory board members and partake in academy-based leadership decisions. | Business partners should be given leadership roles developing professional development for teachers to inform and train current industry needs (Hung et al., 2015). |
| Data-driven decisions. | Business partners provide current employment data, skills articulation feedback, and help monitor internship progress through data collection. | Schools should learn how businesses effectively evaluate an innovations' effects on performance and management (Hazzan & Zelig, 2016) |

## The Concerns-Based Adoption Model

According to Loucks (1983), the CBAM was developed by the University of Texas Research and Development Center for Teacher Education in 1973. The CBAM

emerged from educational settings and was initially designed to innovate educational practices (Acosta & Acosta, 2017; Loucks, 1983). The concept of change as an individual process is an aspect that both Hall and Hord (1984), and Rogers (2003) agree. However, the IC map and the innovation-decision process in organizations are the exceptions to the personal change process hallmarks of both theories. Just as Rogers (2003) promotes communal decision making for change in an organization, a panel of stakeholders should construct the IC map at the school where the innovation will be implemented (Hall & Loucks, 1978; Loucks, 1983; Richardson, 2004).

Like Rogers's (2003) theory, the CBAM framework states that deep and systemic changes in schools occur as a process (Hall & Hord, 1984). The CBAM is comprised of three well-defined dimensions that help smooth the implementation process and reduce resistance. The CBAM dimensions are: (a) *the stages of concern questionnaire*-concerns about implementing the innovation are elicited from those affected by the change; (b) *levels of use*-the group targeted for adoption identify the level to which they already implement the innovation or its components; and (c) *IC mapping*-the tool for creating variations of the innovation (Acosta & Acosta, 2017; Hall & Hord, 1984; Hall & Loucks, 1978; Loucks; Richardson, 2004). The first two dimensions of the CBAM will not be addressed in this study as the purpose of this study is to develop possible variations of the business collaboration component found in successful career academies to meet the needs of Hawai‘i's career academies.

### *Innovation Configuration Mapping*

Hall and Hord (1984) added the IC mapping portion of the CBAM after numerous studies in the 1970s promoted *mutual adaptation*. Mutual adaptation reinforces Rogers

(2003) concept of reciprocal reinvention: Both the innovation and the adopter must adapt to create successful implementation. Similar to Rogers's innovation-decision process, the first step to completing an IC map is to task stakeholder groups with identifying the key features of the innovation (Hall & Hord, 1984; Rice & Rogers, 1980). Then, the stakeholders create variations of the innovation that present multiple ways to use the innovation at the school or in the classroom (Hall & Hord, 1984). The variations also present unacceptable forms of innovation implementation (Hall & Hord, 1984). Hall and Hord (1984) recommend reaching a consensus regarding which variations are ideal, acceptable, and unacceptable for use in the education setting before school-wide implantation. The need to reach a consensus supports the Delphi process as an acceptable method for building the IC map. Table 5 illustrates the alignment between the framework foundational tenants and the: (a) research questions, (b) data needs, (c) data collection, and (d) data analysis the significance of the findings.

**Table 5**

*Framework Alignment Organizer*

| Foundational tenants from conceptual framework → | Research questions → | Data needs → | Data sources → | Data analysis and Significance of findings |
|---|---|---|---|---|
| 1. The process of identifying and defining key features of an innovation is fundamental to successful implementation of an innovation in an organization. | RQ 1a: What key features of the business collaboration component will Hawai‘i career academy stakeholders develop to build variations that meet their specific needs? | Participant contribution when identifying the key features of the business collaboration component. | Phase 1 of Delphi instrument. | Inductive qualitative analysis: thematic coding.<br><br>Hawai‘i career academy stakeholders will gain a technique for the IC development process. This process may offer a strategy for implementing future innovations in Hawaii high school. |
| 2. Stakeholders must adapt, or reinvented, the key features of the innovation to fit the needs of the organization. | RQ 1b: What behavioral variations will Hawai‘i career academy stakeholders develop to support implementation of business collaboration key features? | Participant contribution on defining the key behaviors that will help or hinder implementation of the business collaboration component. | Phase 2 of Delphi instrument. | Inductive qualitative analysis: thematic coding.<br><br>State, complex, and school-level leaders along with classroom teachers may be able to use the business collaboration component variations when implementing the career academy model in high schools across the Hawaiian Islands. |
| 3. Stakeholder groups must clearly communicate their vision for innovation implementation by forming a consensus of which innovation variations are acceptable for use in the organization. | RQ 1: What possible variations of the business collaboration component found in successful career academies will Hawai‘i career academy stakeholders develop to meet their specific needs? | Participant contribution when organizing the ideal, acceptable, and unacceptable behaviors for each key feature of the business collaboration component. | Phase 3 of Delphi instrument and completed IC maps. | Inductive qualitative analysis: thematic coding.<br><br>Hawai‘i career academy teachers, school leaders, and business partners will be supplied with possible acceptable and unacceptable variations of the business collaboration component to aid implementation of the business collaboration component. |

IC maps have been applied in educational settings to identify and policy and practice gaps (Towndrow & Fareed, 2015). Towndrow and Fareed (2015) concluded that IC maps might help facilitate professional development to close policy and practice gaps. Current student performance versus the desired student performance presents an opportunity to apply the IC map process in an education setting. A performance gap is also an issue that can trigger the innovation-decision process in an organization. Such a performance gap exists in the Hawai‘i public school system.

## Literature Review Related to Key Variables and/or Concepts

### History of the Career Academy Model

The career academy model first emerged in the public-school system of Philadelphia in 1969 (Clearinghouse, 2015; NCAC, 2019). Established in 1982, the National Academy Foundation aided in the expansion of the career academy model (NCAC 2019; Sun & Spinney, 2017). In 2013, the National Career Academy Coalition (NCAC) claimed that there were about 7,000 career academies across the United States enrolling nearly one-million students (Castellano et al., 2017; NCAC, 2019). The career academy model soared in popularity at the turn of the 21st-century (Clearinghouse, 2015; Hernández-Gantes et al., 2018). According to Fletcher et al., (2018), the career academy popularity boost occurred due to research associating the model with increased student success. By 2015, California alone hosted 1,200 academies across 500 schools (Clearinghouse, 2015). In 2017, Fletcher and Tyson reported 156 NAF affiliated career academies in Florida enrolling 26,070 students. The model reached the Hawaiian Islands in 2009. By 2017, roughly half of all public high schools on O‘ahu transitioned into carrer academies.

The goals and scope of the career academy model have fluctuated over the last four decades, shifting to meet changing political and educational climates (NCAC, 2019). Early career academies focused on preparing students only for the world of work without equipping them with the skills required for college (Hemelt et al., 2019). At the turn of the 21st-century, career academies around the nation discovered a need to roughly define the model to better obtain federal and local funding (C. Majka, personal communication, February 5, 2019). A multitude of career academy associations, including the National Career Academy Coalition and National Academy Foundation, jointly launched the first National Standards of Practice (NSOP) in 2004 (NCAC, 2019). These associations then met again in 2013 to revise and update the standards (C. Majka, personal communication, February 5, 2019; NCAC, 2019).

The first NSOP released in 2004 argued the benefits of the career academy model for singular student demographics; at-risk students on a path toward dropping out of high school (Hemelt et al., 2019). The 2013 revisions of the NSOP's presented career academies as a model that supports college and career readiness for all students (Clearinghouse, 2015; NCAC, 2019). This inclusive version of the NSOP incorporated heightened expectations for contemporary career academies (NCAC, 2019). The NSOP's were designed to provide schools with measurements of success. They do not provide implementation guidelines for the career academy model nor variations of the academy components to increase adoption rates in unique settings such as the Hawaiian Islands.

**The Career Academy Model Setting**

The current archetype of the career academy setting stems from three fundamental criteria that define and separate the model from a traditional high school setting. All

career academies must; (a) be small learning communities, (b) have a college preparatory curriculum themed to current industry needs, and (c) develop partnerships with local employers, colleges, and communities to supply work-based learning opportunities (Clearinghouse, 2015; Fletcher et al., 2018; Hernández-Gantes et al., 2018; Kasza & Slater, 2017; Kemple & Willner, 2008; Malin & Hackmann, 2017, 2019; NCAC, 2019; Sun & Spinney, 2017). The intent of these fundamentals is to increase student motivation and engagement by liking classroom learning to a career that piques student interest (Fletcher et al., 2018; Fletcher & Tyson, 2017; Hemelt et al., 2019; Hernández-Gantes et al., 2018; Kasza & Slater, 2017; Lanford & Maruco, 2018; Malin et al., 2020; Malin & Hackmann, 2017). Researchers claim that providing rigorous and relevant learning scenarios in high school eases the transition into college as well as the rigorous demands of a modern career (Fletcher et al., 2018; Hemelt et al., 2019; Hernández-Gantes et al., 2018; Malin et al., 2020).

In successful career academy schools, students select a career-themed small learning community, such as health care, engineering, or business, in either ninth or tenth grade (Lanford & Maruco, 2018; Malin et al., 2020; Malin & Hackmann, 2017). These small learning communities form a cohort of students that progress through many courses together until graduation (Hemelt et al., 2019; Hernández-Gantes et al., 2018; Sun & Spinney, 2017). The Career and Technology Education (CTE) programs that support the selected career theme are integrated with core content and work-based learning opportunities (Fletcher et al., 2018; Hernández-Gantes et al., 2018; Kasza & Slater, 2017; Malin et al., 2020; Malin & Hackmann, 2017). These courses and opportunities align with the career theme of the small learning communities (Hackmann et al., 2018, 2019;

Hemelt et al., 2019; Hernández-Gantes et al., 2018; Malin et al., 2020; Malin & Hackmann, 2017). Many career academies offer consecutive CTE courses, called career pathways, where students can earn industry certificates and college credit before high school graduation (Fletcher et al., 2018; Fletcher & Tyson, 2017; Hemelt et al., 2019).

**Career Academy Effects on Student Learning**

The typical high school graduate in the United States is ill-equipped for the post-secondary world (AEE, 2017; Fletcher & Tyson, 2017; Hackmann et al., 2018). Mastery of skills such as creativity, integrity, critical thinking, and self-management is essential for upper-tier employment positions of the 21st-century (Fletcher & Tyson, 2017; Fletcher et al., 2018). Lacking these interdisciplinary skills also creates a barrier to high-demand, high-paying contemporary labor market positions (AEE, 2017; Schulte et al., 2017). The career academy model may present a solution to closing this knowledge and skills defecate.

Reconfiguring an entire school into career pathway small learning communities with rigorous CTE courses prompts an environment rich in interdisciplinary, personalized, real-world learning experiences (Fletcher & Tyson, 2017; Kasza & Slater, 2017; Kemple & Willner, 2008; Malin et al., 2020; Malin & Hackmann, 2017, 2019; Sun & Spinney, 2017). Fletcher et al. (2018) state that “high-quality CTE programs (such as career academies) have the potential for enhancing high school students’ college and career readiness” (p. 81). In these CTE rich environments, teaching transforms into facilitation, and learning becomes collaborative, rigorous, and relevant to skills required by 21st-century industries (Fletcher et al., 2018; Fletcher & Tyson, 2017; Kasza & Slater, 2017; Malin et al., 2020). Students move from bystanders-in to directors of their learning

by immersing in hands-on learning scenarios (Fletcher et al., 2018; Fletcher & Tyson, 2017; Kasza & Slater, 2017; Malin et al., 2020). Stone (2017) expands the above claims to state that rigorous and well organized CTE programs and career pathways that function in collaboration with local industries are required for a successful 21st-century society.

Schulte et al. (2017) urge flexibility in CTE career pathway integration and incorporating student choice. In a student-choice driven environment, students take ownership of the projects or products they produce and experience the power of self-directed learning (Fletcher et al., 2018; Fletcher & Tyson, 2017; Kasza & Slater, 2017). This shift in ownership better prepares students for the demands of life after high school in either a college or career setting (Fletcher et al., 2018; Fletcher & Tyson, 2017; Kasza & Slater, 2017). These pathway options should incorporate input from business partners (Hackmann et al., 2018, 2019; Malin et al., 2020; Malin & Hackmann, 2019; Schulte et al., 2017), reflecting current industry needs and future local demands (Schulte et al., 2017). Shifting education back toward an industry-driven curriculum is not a concept without critics.

The CTE focus of career academies has produced lingering skepticism of the model's ability to prepare students for both college and careers (Fletcher et al., 2018). Fletcher et al. (2018) connects this viewpoint to the experiences of pre-millennial populations where CTE, or vocational, education was designed to prepare students for low-level and low-paying jobs. Recent research has shown that students engaged in advanced or certificating CTE programs are less likely to attend a four-year university immediately after high school (Kreisman & Stange, 2017). In comparison, research has also shown that most students in a traditional high school program of study also do not go

on to achieve a four-year degree (Fletcher et al., 2018). Several factors differentiate these two student populations. Students graduating from CTE programs have higher attendance rates in high school (Dougherty, 2018), and are more likely to earn increased wages after graduation (Kreisman & Stange, 2017). Unlike traditional CTE programs, the career academy model incorporates both career pathways and business collaborations. However, early-career academy research did not present the model as a solution to educational deficiencies (Kemple & Willner, 2008).

A series of longitudinal studies conducted by Manpower Demonstration Research Corporation (MDRC) is repeatedly cited in literature and research associated with career academy participation. The MDRC study is often cited due to its longevity and participant diversity. The study spanned fifteen years, from 1993 to 2008, and examined the causal effects associated with career academy participation (Clearinghouse, 2015; Kemple & Willner, 2008). The most predominant factor reported in the literature that references the MDRC study is that career academy participation most effects students labeled high-risk for dropping out of high school (Clearinghouse, 2015; Hemelt et al., 2019;). MDRC concluded that participation in career academies had little to no statistically significant effects on high school graduation or post-secondary factors for general student populations (Kemple & Willner, 2008).

Fletcher and Tyson (2017) delve deeper into the MDRC research and report factors unlisted by other researchers. These factors include increases similar to those listed as benefits of CTE program participation, such as increased interpersonal skills, engagement, motivation, and a heightened ability to find relevance and meaning in the curriculum. The discrepancies in findings can be explained by examining the data

collection era and lens through which it was considered (Hemelt et al., 2019). Fletcher and Tyson (2017) note that the MDRC initially analyzed their data through a lens that depicted the career academy model as a school reform initiative, not a 21st-century skills development lens. Considering the application of different lenses, contemporary career academies' effects on student factors will undoubtedly have different results from the academies of the 1990s.

Contemporary career academy research reports an increase in many measurements of student success across student demographic groups (Clearinghouse, 2015; Fletcher et al., 2018; Hackmann et al., 2019; Hemelt et al., 2019; Kemple & Willner, 2008; Lanford & Maruco, 2018; Malin et al., 2020; NCAC, 2019; Sun & Spinney, 2017). Career academy participation results in statistically significant increases in graduation rates, attendance, and academic achievement (Hackmann et al., 2019; Hemelt et al., 2019; Malin et al., 2020). Career academy participants are generally higher performing than their non-academy peers (Hemelt et al., 2019). Hemelt et al. (2019) reports an increase in college-going rates for male students. Fletcher et al. (2018) and Hernández-Gantes et al. (2018) concluded that participation in career academies increased student's soft-skill preparations. Comparable to CTE pathway participation, Castellano et al., (2017) found that students who participated in career academies reported an average wage that was 11% higher than their non-academy peers.

While extensive research supports the career academy model as a successful school structure, little research has focused on how the skills gained in career academy programs translate to meet the technical needs of current industries (Fletcher & Tyson, 2017). Fletcher and Tyson conclude that it is vital to examine how national career

academy associations support business collaboration in developing these technical skill sets in students. No research has been found which examines how business collaborations are implemented in Hawai‘i public schools, nor studies that reinvent the business collaboration component for a specific location.

**Business Collaborations and Career Academies**

Literature examining successful career academies exposes five components found in successful career academy model schools. Forming successful business collaborations is vital to each of the five components (Fletcher & Tyson, 2017; Fletcher et al., 2018; Hackmann et al., 2018, 2019; Hernández-Gantes et al., 2018; Lanford & Maruco, 2018; Malin et al., 2020; Malin & Hackmann, 2017, 2019). Collaborating with business partners is then the most predominant component of successful career academy model schools. Table 6 summarizes the business partnership role in each component.

**Table 6**

*Business Collaboration Connection to Successful Career Academy Components*

| Career academy component | Business collaboration connection |
|---|---|
| Cross-sector partnerships. | Business collaborations are cross-sector partnerships. These business partnerships should provide industry-based input and actions to implement for the four components listed below. |
| Collaboratively creating a shared vision for the school. | Business partners should be involved in the career academies' vision development process to ensure the incorporation of skills and knowledge that correlates with current industry standards. |
| Rigorous curriculum themed to industry needs. | Business partners help develop and implement work-based learning opportunities for both teachers and students. Business partners also take an active role in developing and implementing industry-relevant curriculum that prepares students with the post-secondary skills and knowledge they need to succeed after high school. |
| Diverse leadership opportunities. | Business partners should be advisory board members and partake in academy-based leadership decisions. |
| Data-driven decisions. | Business partners should provide current employment data, skills articulation feedback, and help monitor internship progress through data collection. |

Distributing leadership roles to business partners is essential to forming business collaborations (Hackmann et al., 2018; Malin et al., 2020; Malin & Hackmann, 2017). One method of distributing leadership roles into the community is through the formation of an advisory board for each career-themed academy in the school (Fletcher et al., 2018; Hackmann et al., 2018; Hernández-Gantes et al., 2018; Malin et al., 2020; Malin & Hackmann, 2017, 2019; Sun & Spinney, 2017). These advisory boards consist of

community members, college representatives, local business leaders, and teachers (Fletcher et al., 2018; Hernández-Gantes et al., 2018; Hackmann et al., 2018; Malin & Hackmann, 2017, 2019). These collaborations support the development of all five components listed in Table 6 (Fletcher & Tyson, 2017; Fletcher et al., 2018; Hackmann et al., 2018, 2019; Hernández-Gantes et al., 2018; Lanford & Maruco, 2018; Malin et al., 2020; Malin & Hackmann, 2017, 2019).

Business partnerships provide opportunities that are not typically found in traditional school settings (Fletcher & Tyson, 2017; Fletcher et al., 2018; Hernández-Gantes et al., 2018; Malin et al., 2020). Work-based learning experiences developed through business collaborations equip students with the employability skills and knowledge they need to succeed in their industry of choice (Fletcher et al., 2018; Fletcher & Tyson, 2017; Hackmann et al., 2018; Hernández-Gantes et al., 2018; Kasza & Slater, 2017; Malin & Hackmann, 2019). In successful career academies, work-based learning occurs through various interactions between students and business partners at each grade level, eventually placing students in internship or apprentice programs (Fletcher et al., 2018; Hemelt et al., 2019; Hernández-Gantes et al., 2018; Malin et al., 2020; Malin & Hackmann, 2017, 2019). Learning increases overall by gaining first-hand knowledge of routine information applicability in the world beyond the walls of the school (Fletcher & Tyson, 2017; Malin et al., 2020), and the business partners gain direct access to future employees (Fletcher et al., 2018; Malin & Hackmann, 2017). Researchers attribute the quality of the school's internship program to the overall success of the career academy (Fletcher et al., 2018; Hemelt et al., 2019).

Business collaborations are also essential to creating a rigorous and relevant career-themed curriculum that better prepares students for post-secondary challenges (Fletcher et al., 2018; Fletcher & Tyson, 2017; Hackmann et al., 2018; Hernández-Gantes et al., 2018; Kasza & Slater, 2017; Malin & Hackmann, 2019). A rigorous, interdisciplinary curriculum combining core and CTE content aligned to career-based themes is found in successful career academies (Fletcher et al., 2018; Hackmann et al., 2019; Hemelt et al., 2019; Malin et al., 2020; Malin & Hackmann, 2017; Sun & Spinney, 2017). One potential barrier to implementing this component is a lack of teachers experienced in the industry-related occupations of the career academies (Fletcher et al., 2018; Fletcher & Tyson, 2017). Professional development run by business partners helps teachers stay up to date with industry needs, trends, and the latest technological innovations (Fletcher et al., 2018; Fletcher & Tyson, 2017; Hackmann et al., 2019).

The above recommendations were extracted from literature and studies conducted in successful career academy model schools. These schools were well beyond the transition stage. The literature did not contain recommendations as to how a school new to business collaborations might begin implementing the innovation. In addition, developing variations as an implementation strategy for business collaborations was not found in the literature. Findings from this study have the potential of filling this gap in the literature.

**Need for Social Change in Hawai‘i High Schools**

In 2017, over 90% of Hawai‘i high school juniors indicated that they intended pursuing educational opportunities after high school (HSDOE & HSBOE, 2016). The current performance of Hawai‘i high schools present challenges for these post-secondary

goals. Hawai‘i high schools have reported multiple years of student performance that lags behind the national average (ACT, 2017, 2019; Strive HI, 2018, 2021) even though both the 2012 and 2017 strategic plans outlined strategies to improve student achievement (HSDOE & HSBOE, 2016). In 2019, ACT reported Hawai‘i students scoring 9 to 13% below the national average on all reported academic areas. In addition, since 2016 approximately 50% of students in Hawai‘i failed to reach proficiency in all areas reported on the states' Smarter Balanced Assessment (SBA) (HSDOE, 2018; Strive HI, 2018, 2021). Disaggregating the data by content area revealed the following average below proficiency rates; 48% in language arts, 57% in science, and 60% in mathematics (HSDOE, 2018; Strive HI, 2018, 2021).

The college and career readiness indicators report from Hawai‘i P-20 partnerships for education (2018) further indicates a lack of college preparation in Hawai‘i high schools. Hawaii P-20 (2018) reports 55% of Hawai‘i high school graduates enrolled in either a two- or four-year post-secondary program the first fall after high school. The percent of college enrollment to total graduates has remained relatively consistent over the last six years, fluctuating by two percent between 2012 to 2017 (Hawai‘i P-20, 2018). This consistency indicates no significant increase in college attendance rates since the implementation of the first joint strategic plan in 2012. On average, 22% of the total post-secondary program enrollees did not matriculate the following fall (Hawai‘i P-20, 2018). The re-enrollment rate has also remained relatively consistent over the last six years (Hawai‘i P-20, 2018). While the Hawai‘i P-20 report does not track student persistence beyond their second fall enrollment period, the data trend does not predict high levels of post-secondary degree attainment by Hawai‘i high school graduates.

Additionally, precisely 3,753 of the 10,887 graduates in 2017 entered a post-secondary program at the University of Hawai‘i system (Hawai‘i P-20, 2018). Combining both two- and four-year degree program students, approximately 34% of enrolled in a University of Hawai‘i mathematics courses at the college level. About 50% enrolled in the University of Hawai‘i English courses at the college level. However, over 80% of Hawai‘i high school students are graduating on time with a traditional high school diploma (HSDOE, 2018; Strive HI, 2018, 2021). These figures indicate a gap between the skills and knowledge required to graduate from a Hawai‘i public high school and those required to enter into and succeed in a post-secondary education setting.

In response to the above performance gaps, the 2017-2020 joint strategic plan acknowledged a need to improve student achievement across Hawai‘i public schools through innovative programs and strategies (HSDOE & HSBOE, 2016). One of the proposed programs was “career readiness pathways” (HSDOE & HSBOE, 2016, p. 11). The career pathway program intends to ensure students gain the skills and knowledge they need to succeed in college or a career upon high school graduation. The HSDOE and HSBOE claim that career pathways will increase student engagement by creating real-world learning scenarios (2016). The joint strategic plan introduces the goals of Hawai‘i education agencies forming partnerships with businesses and post-secondary institutions to develop these learning scenarios. The strategic plan then states that the business partnerships will ensure that the knowledge and skills presented in career pathways and CTE courses will align with current industry standards.

The career pathway and business partnerships goals of the 2017-2020 joint strategic plan are also components found in successful career academies model schools.

In addition, several themes found in Hawai‘i public schools that currently report high student growth rates also correlate with the components of successful career academy model schools. The correlated themes are governance systems that fostered shared and distributed leadership, data-driven instructional and curricular decisions, plus a shared responsibility for student success (Coryn et al., 2014). Table 7 summarizes the themes and crosswalks them to the components found in successful career academy model schools.

**Table 7**

*Crosswalk of Strategic Plan and High Growth Hawai‘i School Themes with Components Found in Successful Career Academy Schools*

| Components of successful career academy model schools | Strategic plan goals and themes of high growth Hawai‘i high schools |
|---|---|
| Cross-sector partnerships. | The business partnerships goals of the 2017-2020 joint strategic (HSDOE & HSBOE, 2016). |
| Collaboratively creating a shared vision for the school. | Shared responsibility for student success (Coryn, et al., 2014) |
| Rigorous curriculum themed to industry needs. | The career pathway goal the 2017-2020 joint strategic (HSDOE & HSBOE, 2016). |
| Diverse leadership opportunities. | A governance-systems which fostered shared and distributed leadership (Coryn, et al., 2014). |
| Data-driven decisions. | Data-driven instructional and curricular decisions (Coryn, et al., 2014). |

This crosswalk supports the implementation of the career academy model in Hawai‘i high schools and reinforces the need to develop variations the business collaboration component to meet the needs of Hawai‘i schools. Currently, no literature exists concerning developing variations of business collaborations for Hawai‘i career academies, nor strategies to facilitate the variation development process.

**Studies Using the Qualitative Delphi Method**

Few recent studies were found that applied solely qualitative data collection techniques in a Delphi study. The sparsity of literature might stem from a lack of methodology guidelines for the research technique (Brady, 2015; Sekayi & Kennedy, 2017). Each of the qualitative Delph studies found in the review of the literature adheres to the iterative rounds and controlled feedback requirements of a Delphi study. The first round of each study also began by posing an open-ended question or prompt aligning the study with qualitative data collection techniques. However, the number of rounds and the use of controlled feedback varied between studies.

Both Roberts and Kovacich (2018) and Greason (2018) used two rounds of data collection. Each round consisted of posing a question, compiling responses, supplying controlled feedback, and reaching a consensus before concluding the round. The second round question was generated from or built upon the results of the first round. While both Brady and O'Connor (2014) and Froerer and Connie (2016) applied three Delphi rounds, the researchers used the consecutive rounds differently. After compiling responses from their initial prompt, Brady and O'Connor (2014) sent all responses to their participants as the controlled feedback. The second round was used to gather feedback on the responses from the participants. Questions were formed from this feedback and posed in the third round. Froerer and Connie (2016) posed three different questions in the first round of data collection. The subsequent rounds were used to deliver controlled feedback and work toward a consensus or to pose questions based on the participant responses. The inconsistencies between the use of rounds were not the differences between studies. Each study was conducted to reach a different purpose and outcome.

Roberts and Kovacich (2018) cite Charlton (2004) stating that the qualitative Delphi process is a research method that can serve two simultaneous purposes; exploring a problem and providing solutions. This twofold purpose is not common in other qualitative research methods (Roberts & Kovacich, 2018). To access the solution-building feature of this method, one researcher added the qualitative Delphi method to a basic qualitative study (Greason, 2018). While conducting interviews exploring long term care practices and ethical policies, common themes arose regarding policies that prevented care providers from making ethical decisions (Greason, 2018). Greason (2018) added the qualitative Delphi method to develop possible solutions that might close this policy and practice gap. While the solution-building feature of the method is advantageous, it is not the only use for the qualitative Delphi process.

Qualitative Delphi studies were also found that applied the method to explore a problem and achieve the following purposes; (a) define a phenomenon, (b) present participant formulated solutions, and (c) develop a model (Brady, 2015; Brady & O'Connor, 2014; Froerer & Connie, 2016; Greason, 2018; Roberts & Kovacich, 2018). Two studies were found that resulted in the development of a model. However, the researchers combined this primary purpose of their study with a secondary purpose. In Roberts and Kovacich's (2018) study, a model was created to represent participant formulated solutions. Brady and O'Connor's (2014) model was developed to illustrate a definition and process. In another study, the qualitative Delphi method was used to develop a definition, but a model was not produced (Froerer & Connie, 2016). This combination of purposes and uses for the qualitative Delphi process resulted in little similarity or guidance when using the method to develop a model.

The lack of guidance when developing a model using the qualitative Delphi method is significant to this study. In this study, the qualitative Delphi method will be used to develop an IC map. The resulting IC map will be a model illustrating variations of the business collaboration component for Hawai‘i’s career academies. Though this exhaustive review of the literature has resulted in little consistency between qualitative Delphi studies, a distinct process for conducting qualitative Delphi studies emerged in a 2017 study by Sekayi and Kennedy. The guidelines presented in this study, along with a description of how this study will follow these recommendations, will be discussed in detail in chapter three. Applying Sekayi and Kennedy’s (2017) adaptations in this study could add to the limited literature base on qualitative Delphi studies. In addition, no literature exists that applies the qualitative Delphi process method to developing variations of the business collaboration component. A distinct gap in the literature remains. This study could fill the gap in the literature by developing possible variations of the business collaboration component for Hawai‘i’s career academies.

## Summary and Conclusions

At the beginning of this chapter, two diffusion theories were combined to form the theoretical framework of this study. Both Rogers’s (2003) innovation-decision process in organizations and the IC map portion of the CBAM supports reinventing an innovation to develop variations (Hall & Hord, 1984; Hall & Loucks, 1978; Loucks, 1983). Developing variations of an innovation to meet the needs of a location and clientele will increase and sustain adoption rates of an innovation (Hall & Hord, 1984; Hall & Loucks, 1978; Loucks, 1983; Rice & Rogers, 1980; Rogers, 2003). Constructing

an IC map is one reinvention strategy that provides acceptable and unacceptable variations of an innovation (Hall & Hord, 1984; Hall & Loucks, 1978; Loucks, 1983).

This chapter also presented an extensive review of the literature exploring the role of business collaborations in the career academy model. Business collaborations are fundamental to the success of career academy model schools (Fletcher & Tyson, 2017; Hackmann et al., 2018, 2019; Hernández-Gantes et al., 2018; Kasza & Slater, 2017; Lanford & Maruco, 2018, 2019; Malin et al., 2020; Malin & Hackmann, 2017, 2019). In addition, the career academy model was reported as having positive impacts on many measurements of student success (Clearinghouse, 2015; Fletcher et al., 2018; Hackmann et al., 2019; Hemelt et al., 2019; Kemple & Willner, 2008; Lanford & Maruco, 2018; Malin et al., 2020; NCAC, 2019; Sun & Spinney, 2017). Hawai‘i schools need the social change of the career academy model and business collaborations to close the performance gap between desired and actual student achievement (ACT, 2017, 2019; Strive HI, 2018, 2021). However, little guidance exists to aid Hawai‘i career academy stakeholders with the implementation of either the business collaboration or career academy model innovations.

Increased understanding of this topic could fill the gap in the literature by developing possible variations of the business collaboration component for Hawai‘i’s career academies. The variations should increase and sustain adoption rates of the business collaboration component in Hawai‘i career academies (Hall & Hord, 1984; Hall & Loucks, 1978; Loucks, 1983; Rice & Rogers, 1980; Rogers, 2003). State, complex, and school-level leaders, along with classroom teachers, may be able to use the business collaboration component variations when implementing the career academy model in

high schools across the Hawaiian Islands. An IC map will be developed to model these variations. The qualitative Delphi method has been used by other researchers to create a model, but few consistencies were found between these studies to the process.

The research design and rationale, my role as the researcher, and issues of trustworthiness are described in Chapter 3. An explanation of the methodology required to complete the IC map using the qualitative Delphi process is also discussed.

# Chapter 3: Research Method

## Introduction

The purpose of this qualitative Delphi study was to develop possible variations of the business collaboration component found in successful career academies that meet the needs of Hawai‘i’s career academies. The variations should increase and sustain adoption rates of the business collaboration component in Hawai‘i career academies (Hall & Hord, 1984; Hall & Loucks, 1978; Loucks, 1983; Rice & Rogers, 1980; Rogers, 2003). Currently, no literature exists concerning developing variations of business collaborations for Hawai‘i career academies, nor strategies to facilitate the variation development process.

This chapter contains three sections. First, I address the research design details including the design rationale and my role as the researcher in this study. I then address the methodology applied in this study, which includes the criteria for participant selection, development of instrumentation, procedures for recruitment, data collection, and data analysis. In the last section I address the four domains of trustworthiness and procedures.

## Research Design and Rationale

The following research questions and subquestions were created to develop possible variations of the business collaboration component found in successful career academies that meet the needs of Hawai‘i’s career academies.

RQ 1. What possible variations of the business collaboration component found in successful career academies will Hawai‘i career academy stakeholders develop to meet their specific needs?

RQ 1a. What key features of the business collaboration component will Hawai‘i career academy stakeholders develop to build variations that meet their specific needs?

RQ 1b. What behavioral variations will Hawai‘i career academy stakeholders develop to support implementation of business collaboration key features?

The central phenomenon on which I focused this study was developing variations of the business collaboration component to meet the needs of Hawai‘i’s career academies. I used the IC mapping strategy as a tool to facilitate development of variations of the business collaboration component using a qualitative Delphi method for data collection.

**The Delphi Method**

The Delphi method was first formed and implemented by the RAND Corporation in the 1950s (Brady, 2015; Dalkey & Helmer, 1963; Linstone & Turoff, 2011; Rose et al., 2015; Omer Attali & Yemini, 2017). Since its development, many variations of the data collection technique have emerged (Brady, 2015; Sekayi & Kennedy, 2017). Regardless of the variation, researchers agree that the Delphi method is a communication strategy designed to work a group of experts toward a reliable consensus that is devoid of negative group influences (Brady, 2015; Dalkey & Helmer, 1963; Habibi et al., 2014; Kosloski & Ritz, 2016; Mohr & Shelton, 2017; Omer Attali & Yemini, 2017; Rose et al., 2015; Sekayi & Kennedy, 2017). Independent thought is fostered by collecting data through individual interviews, surveys, or questionnaires (Brady, 2015; Dalkey & Helmer, 1963). Data collection phases include initial responses, controlled feedback, and an averaging or ranking of results (Brady, 2015; Dalkey & Helmer, 1963; Mohr & Shelton, 2017; Omer Attali & Yemini, 2017). Unique features of the Delphi method

include its inclusive nature, participants' ability to question other expert's responses, and the goal of working toward a consensus (Greason, 2018). Greason (2018) cited Powell (2003) stating that these unique features increase participants' ability to transfer knowledge and their commitment to outcomes reached during the Delphi process.

To form the reliable consensus, three or four iterative rounds of data collection occur in a way that maintains participant anonymity (Brady, 2015; Dalkey & Helmer, 1963; Habibi et al., 2014; Mohr & Shelton, 2017; Omer Attali & Yemini, 2017). In the first round of data collection, initial responses to a question are gathered form the panel of experts (Brady, 2015; Dalkey & Helmer, 1963; Sekayi & Kennedy, 2017). The initial responses are then organized into controlled feedback by the researcher. In the second round, the controlled feedback is presented back to the participants (Dalkey & Helmer, 1963; Habibi et al., 2014; Kosloski & Ritz, 2016; Linstone & Turoff, 2011). The panel of experts is then asked to maintain or alter their initial responses based on the controlled feedback (Dalkey & Helmer, 1963; Habibi et al., 2014; Linstone & Turoff, 2011). The feedback and responding round can repeat until the researcher identifies some degree response convergence, which represents the consensus (Dalkey & Helmer, 1963).

Arriving at a unanimous consensus is not typical in a Delphi study (Dalkey & Helmer, 1963; Sekayi & Kennedy, 2017). A ranking system is usually applied in the final round of data collection to determine the reliable consensus (Habibi et al., 2014; Mohr & Shelton, 2017; Sekayi & Kennedy, 2017). Common numerical ranking systems applied to either qualitative or quantitative Delphi data include the Likert scale, confidence rating, or Kendall's coefficient of concordance (Habibi et al., 2014; Mohr & Shelton, 2017; Sekayi & Kennedy, 2017). Statements or findings that receive higher ranking by a larger

percentage of participants are presented as the consensus (Sekayi & Kennedy, 2017). The need to include a numerical ranking system in a Delhi study creates barriers when applying the method to qualitative research (Brady, 2015; Sekayi & Kennedy, 2017). Adding a numerically-based ranking system to data either retains the quantitative nature of the study or transforms a qualitative study into a mixed-method research design.

**Adapting the Delphi Method for Qualitative Use**

Few guidelines exist for implementing the Delphi method in solely qualitative research (Brady, 2015; Sekayi & Kennedy, 2017). The little guidance that does exist converges on several points: (a) a thematic coding system should be applied to participant responses, (b) data can be gathered electronically using open-ended questionnaires, and (c) a non-numeric ranking system, such as Thurstone scaling, should be applied as the ranking system to form the reliable consensus (Brady, 2015; Sekayi & Kennedy, 2017). A distinct process for conducting qualitative Delphi studies did not emerge until Sekayi and Kennedy's 2017 study. Sekayi and Kennedy's (2017) qualitative process includes three data collection rounds that follow the general description of the Delphi process described in the previous section. Several key distinctions proposed by Sekayi and Kennedy (2017) retain the qualitative nature of a study while following the Delphi tradition.

The most significant distinction in Sekayi and Kennedy's (2017) Delphi process occurs in Round 3 of the data collection process. Sekayi and Kennedy recommended employing Thurstone scaling to avoid the incorporation of a numerical ranking system. Thurstone scaling replaces numerical ranking with nonnumeric, qualitative, endorsement statements for ranking purposes. The following are common Thurstone scaling

endorsement statements; strongly endorsed, moderately endorsed, and minimally endorsed (Sekayi & Kennedy, 2017). Table 8 lists additional distinctions between Sekayi and Kennedy's (2017) qualitative Delphi approach and traditional quantitative or mixed method Delphi studies.

**Table 8**

*Distinctions Between Qualitative Delphi Process and Traditional Delphi Process*

| Data collection round | Typical Delphi data collection process | Distinctions for qualitative Delphi proposed by Sekayi and Kennedy (2017) |
|---|---|---|
| Round 1 | Initial responses are gathered. Responses are then organized into controlled feedback by the researcher (Brady, 2015; Dalkey & Helmer, 1963; Sekayi & Kennedy, 2017). | Initial response round becomes an open-ended brainstorming session. Apply thematic coding to narrative responses and form summarized statements. |
| Round 2 | The panel of experts is asked to maintain or alter their initial responses based on the controlled feedback. The feedback and responding round can repeat until the researcher identifies some degree response convergence (Dalkey & Helmer, 1963; Habibi et al., 2014; Kosloski & Ritz, 2016; Linstone & Turoff, 2011). | Each expert is asked to either leave the summarized statement as it is presented or to make minor modifications for clarity or applicability. This process occurs once. |
| Round 3 | Use numerical system for ranking responses (Habibi et al., 2014; Mohr & Shelton, 2017; Sekayi & Kennedy, 2017). | Use non-numerical system for ranking responses. |

While working toward the consensus, Sekayi and Kennedy stated that the preliminary results of a qualitative Delphi study should include all moderately and strongly endorsed statements (Sekayi & Kennedy, 2017). The authors then recommended two options for the final presentation of the reliable consensus: (a) the researcher

establishes a percentage threshold for statements that were moderately or strongly endorsed by participants, or (b) only include statements that all participants strongly endorsed (Sekayi & Kennedy, 2017). This consensus-forming feature aligns the qualitative Delphi method with aspects of this study's conceptual framework. Table 9 illustrates further alignment between the conceptual framework foundational tenants, research questions, data needs, data collection, and data analysis plus the significance of the findings.

**Table 9**

*Framework Alignment Organizer*

| Foundational tenants from conceptual framework → | Research questions → | Data needs → | Data sources → | Data analysis and Significance of findings |
|---|---|---|---|---|
| 1. The process of identifying and defining key features of an innovation is fundamental to successful implementation of an innovation in an organization. | RQ 1a: What key features of the business collaboration component will Hawai‘i career academy stakeholders develop to build variations that meet their specific needs? | Participant contribution when identifying the key features of the business collaboration component. | Phase 1 of Delphi instrument. | Inductive qualitative analysis: thematic coding.<br><br>Hawai‘i career academy stakeholders will gain a technique for the IC development process. This process may offer a strategy for implementing future innovations in Hawaii high school. |
| 2. Stakeholders must adapt, or reinvented, the key features of the innovation to fit the needs of the organization. | RQ 1b: What behavioral variations will Hawai‘i career academy stakeholders develop to support implementation of business collaboration key features? | Participant contribution on defining the key behaviors that will help or hinder implementation of the business collaboration component. | Phase 2 of Delphi instrument. | Inductive qualitative analysis: thematic coding.<br><br>State, complex, and school-level leaders along with classroom teachers may be able to use the business collaboration component variations when implementing the career academy model in high schools across the Hawaiian Islands. |
| 3. Stakeholder groups must clearly communicate their vision for innovation implementation by forming a consensus of which innovation variations are acceptable for use in the organization. | RQ 1: What possible variations of the business collaboration component found in successful career academies will Hawai‘i career academy stakeholders develop to meet their specific needs? | Participant contribution when organizing the ideal, acceptable, and unacceptable behaviors for each key feature of the business collaboration component. | Phase 3 of Delphi instrument and completed IC maps. | Inductive qualitative analysis: thematic coding.<br><br>Hawai‘i career academy teachers, school leaders, and business partners will be supplied with possible acceptable and unacceptable variations of the business collaboration component to aid implementation of the business collaboration component. |

**Qualitative Delphi Method Applied to this Study**

Forming a consensus when developing variations of an innovation is supported by both the IC map portion of the CBAM (Hall & Hord, 1984) and Rogers's (2003) innovation-decision process in organizations. The recommendation of reaching a consensus identifies the Delphi method as an acceptable strategy for building an IC map. Using the qualitative Delphi process to develop program variations is also an appropriate use of the method (Hsu and Sandford as cited in Greason, 2018). This application aligns the qualitative Delphi method with the purpose of this study; developing possible variations of the business collaboration component found in successful career academies that meet the needs of Hawai‘i's career academies. Table 10 details these alignments. In Table 10 I also identified additional researcher presented reasons for choosing the qualitative Delphi method and how those reasons are reflected in this study.

**Table 10**

*Reasons for ChoosingQqualitative Delphi Method*.

| Reasons researchers chose qualitative Delphi method | Application in this study |
|---|---|
| Explore and identiy elements of a phenoenon (Habibi et al., 2014). | Identifying and defining the key features of an innovation is stated in the first foundational tenet of conceptual framework (Hall & Hord, 1984; Rogers, 2003). |
| Develop program variations (Hsu & Sandford as cited in Greason, 2018,). | The purpose of this study is to develop possible variations of the business collaboration component found in successful career academies that meet the needs of Hawai‘i’s career academies.<br><br>Creating variations to meet the needs of an organization is stated in the second foundational tenet of conceptual framework: (Hall & Hord, 1984; Rogers, 2003). |
| Seeking a group consensus (Brady, 2015; Greason, 2018; Habibi et al., 2014; Sekayi & Kennedy, 2017) | The third foundational tenet of conceptual framework states that stakeholders must form a consensus of which innovation variations are acceptable for use in the organization (Hall & Hord, 1984; Rogers, 2003). |
| Data collection method allows inclusion of participants best suited to the study, regardless of location, in a cost-efficient manner (Brady, 2015; Brady & O’Connor, 2014; Linstone & Turoff, 2011; Omer Attali & Yemini, 2017; Rose et al., 2015; Sekayi & Kennedy, 2017). | Data collection will occur asynchronously using an online platform. This strategy will negate the challenges of including Hawai‘i career academy stakeholders in geographically diverse and remote settings across the Hawaiian Islands. |
| Allows both problem exploration and development of solutions (Roberts & Kovacich, 2018) | Developiong the IC map may provide possible solutions for the lack of business collaboration variations that meet the needs of Hawai‘i's career academies. |
| Allows participation from stakeholders that are not in leadership roles (Brady, 2015) | Hawai’i career academy teachers, business partners, and school leaders form the stakeholder groups for this study. |

A crucial aspect of this study was equally valuing the experiences, expertise, and perspectives of different Hawai‘i career academy stakeholder groups. The application of

the Delphi method ensured this aspect (Brady, 2015; Mohr, & Shelton, 2017). The panel of experts neither met in a face-to-face setting nor gained knowledge of other participant's identities. The anonymity guaranteed by the Delphi method supports an inclusive and equitable environment (Dalkey & Helmer, 1963; Mohr, & Shelton, 2017; Omer Attali & Yemini, 2017). This feature of the Delphi method also negates negative group influence while promoting independent contributions and thoughts (Brady, 2015; Dalkey & Helmer, 1963; Omer Attali & Yemini, 2017).

Additionally, several recent Delphi studies recommend collecting data via email or other online platforms to allow asynchronous input from experts in geographically diverse locations in a cost-efficient manner (Brady, 2015; Linstone & Turoff, 2011; Omer Attali & Yemini, 2017; Rose et al., 2015; Sekayi & Kennedy, 2017). This recommendation negated the challenges of including Hawai‘i career academy stakeholders in geographically diverse and remote settings across the Hawaiian Islands. These reasons uniquely align the qualitative Delphi method to the framework and purpose of this study. This alignment supports the qualitative Delphi method as an appropriate strategy for developing variations of the business collaboration component with Hawai‘i career academy stakeholders. Alternate research methods were considered for this study. Table 11 identifies additional methods that were considered for this study and the reason they were rejected.

**Table 11**

*Alternative Qualitative Methods Considered and Reasons for Rejection*

| Qualitative method | Summary of method | Reason for rejection |
|---|---|---|
| Heuristic Inquiry | Seeks to capture the essence of participating in a program as experienced by the researcher. | While my lived-experience as a teacher in a recently-transitioned Hawaii career academy may provide the necessary requirements to conduct a heuristic inquiry, capturing the essence of my implementation experience is not the focus of this study. |
| Narrative inquiry | Seeks to reveal aspects of an individual's life or culture through interpretation of their stories. | Participants in this study may draw on past business collaboration experiences to develop innovation variations and determine which are more feasible than others, but this study does not solely focus on the lived experiences of an individual's past. The focus of this study is to provide implementation options for future use in Hawaii career academies. |
| Participatory qualitative applications | Formulating, executing, then analyzing plans for social change. | Thought this study will produce possible variations that Hawaii career academies might implement in the future, the main focus of this study is not to study the results of implementing these variations. |
| Realism | Determine how and why events occur within a context. | While this study may explore current business collaboration practices, the main focus of this study is not to expose the causal mechanisms of the components' implementation. The focus of this study is to develop variations of the business collaboration component to increase implementation. |
| Systems theory | Study of a system to reveal how and why it functions. | The main focus of this study is not to determine how or why the business collaboration component currently functions in Hawaii career academies. This study will provide alternative business collaboration component formats that Hawaii career academies might implement. |

The panel of experts for this study will consist of individuals from three Hawai‘i career academy stakeholder groups: Teachers, school leaders, and business partners. Each

of these stakeholder groups has different, first-hand knowledge of the career academy environment. The participants will share knowledge, expertise, and pull from their personal experiences as they work toward reliable consensus' to build the IC map.

Each expert each made contributions to the IC map sections using the online Delphi instrument. The IC map was separated into three distinct sections to minimize the data collection phases. Data collection occured in three phases. Each phase consisted of three rounds. The data collection phases and rounds are detailed in Table 12.

**Table 12**

*Data Collection Phases and Rounds Alignment*

| Data Phase and RQ alignment → | Data Round → | Delphi instrument prompt → | Data analysis per round |
|---|---|---|---|
| 1. Phase 1<br><br>RQ 1a: What key features of the business collaboration component will Hawai'i career academy stakeholders develop to build variations that meet their specific needs? | Round 1 | P1R1. Generate a list of key features of the business collaboration component found in successful career academies. | P1R1. Inductive qualitative analysis: Thematic coding. |
| | Round 2 | P1R2. The following themes emerged from the Round 1 data collection. Please review these themes and add any comments or concerns you might have with them or their wording or meaning. | P1R2. Return summarized statements to participants.<br><br>Inductive qualitative analysis: Thematic coding. |
| | Round 3 | P1R3. Please rank each statement according to your level of endorsement. | P1R3. Apply Thurstone scaling. |

| Data Phase and RQ alignment → | Data Round → | Delphi instrument prompt → | Data analysis per round |
|---|---|---|---|
| 2. Phase 2<br><br>RQ 1b: What behavioral variations will Hawai‘i career academy stakeholders develop to support implementation of business collaboration key features? | Round 1 | P2R1. For each component identified in phase one, what are ideal and unacceptable behaviors of school leaders, business partners, and teachers that will help establish business collaborations in Hawaii career academies? | P2R1. Inductive qualitative analysis: Thematic coding. |
| | Round 2 | P2R3. The following themes emerged from the Round 1 data collection. Please review these themes and add any comments or concerns you might have with them or their wording or meaning. | P2R3. Return summarized statements to participants.<br><br>Inductive qualitative analysis: Thematic coding. |
| | Round 3 | P2R3. Please rank each statement according to your level of endorsement. | P2R3. Apply Thurstone scaling. |
| 3. Phase 3<br><br>RQ 1: What possible variations of the business collaboration component found in successful career academies will Hawai‘i career academy stakeholders develop to meet their specific needs? | Round 1 | P3R1. For each component identified in phase one, what are acceptable (not ideal, but not unacceptable) behavior variations of of school leaders, business partners, and teachers that will help establish business collaborations in Hawaii career academies? | P3R1. Inductive qualitative analysis: Thematic coding. |
| | Round 2 | P3R2. The following themes emerged from the Round 1 data collection. Please review these themes and add any comments or concerns you might have with them or their wording or meaning. | P3R2. Return summarized statements to participants. Inductive qualitative analysis: Thematic coding. |
| | Round 3 | P3R3. Please rank each statement according to your level of endorsement. | P3R3. Apply Thurstone scaling. |

In Phase 1 of data collection, stakeholders were tasked with identifying the key features of the business collaboration component (Hall & Hord, 1984; Rice & Rogers, 1980). In Phase 2, stakeholders were tasked with creating ideal and unacceptable variations of each key feature they identified in phase one (Hall & Hord, 1984;

Richardson, 2004). In Phase 3, the participants generated acceptable variations of the ideal variations for each key feature (Hall & Hord, 1984; Richardson, 2004). Hall and Hord (1984) recommend reaching a consensus regarding which variations are ideal, acceptable, and unacceptable for use in the school's setting. The need to reach a consensus supports the Delphi process as an acceptable method for building the IC map.

The data collection rounds are in accordance with Sekayi and Kennedy's (2017) qualitative Delphi process as presented in Table 8: Round 1: gather initial responses in an open-ended brainstorming session and thematically code the data; Round 2: return controlled feedback to participants, collect additional input, and modify initial responses based on additional input; Round 3: apply non-numerical, Thurstone scaling, as the ranking system to form the reliable consensus. This process was repeated for each step in the IC map creation. The completed IC maps contain the variations of the business collaboration component.

## Role of the Researcher

I had three roles in this study. My first role was to recruit the panel of experts that have experience as Hawaii career academy teachers, school leaders, or business partners. I also organized, coded, and themed participant responses. Most importantly, I had the role of ensuring participant anonymity. As stated above, the concealment of participant identity is vital to creating an environment where independent thoughts flourish.

My employment in the HSDOE presents possible situations for bias and trustworthiness concerns in this study. Ten of my past 15-years of public education employment were spent in various HSDOE positions. For the past six years, I have been employed at a Hawai‘i high school that recently transitioned into the career academy

model. My first two years at this school were spent as a classroom teacher. In the last five years, I have served as a full-release, new teacher mentor and have taken various leadership roles. One of my current responsibilities is to help develop, launch, and train the entire faculty on a standards-based grading system that will unilaterally translate between courses. The purpose of this grading system is to support the transition into the career academy model though interdisciplinary project and work-based learning scenarios. This leadership role spurred my initial interest in career academy model implementation aspects.

My preexisting and diverse relationships with individuals that fit the sample population descriptors creates advantages and disadvantages. My current school of employment, is the largest on all the islands. The school employs about 215 teachers, eight vice principals, one principal, six non-classroom teacher leaders, and numerous business partners. This school represents the single largest possible sample population pool, in one location, for this study. Initially, I removed this school from the possible sources of participants due to my leadership and mentorship roles to remove possible biases and trustworthiness concerns. However, after several extensions in the recruitment timeline did not yield the required number of participants, I requested permission from the Hawai‘i Data Research Governance Board and the Walden University IRB to add my current school of employment was added to the potential participant pool. The lack of initial participants may be attributed to disruptions caused by the COVID-19 pandemic. The anonymity afforded by the Delphi method may have reduced some bias, credibility and confirmability that could have otherwise compromised the results of this study. The previously mentioned leadership roles have brought me into contact with individuals who

hold higher-ranking positions in neighboring high schools, complex areas, and district offices at many other Hawai‘i high schools that have also recently transitioned into the career academy model. The district-level connections helped supply access to participants after the snowball sampling strategy was applied.

The Delphi process is naturally reflexive and participants had the opportunity to confirm my summarizations before moving onto successive rounds. The inductive analysis provided an objective means of organizing, coding, and theming participant's responses. Patton’s (2015) constant comparison strategy of revisiting data multiple times to check for coding continuity will also be applied to decrease bias.

## Methodology

### Participant Selection Logic

A heterogeneous population is recommended for Delphi studies to ensure multiple perspective considerations (Omer Attali & Yemini, 2017; Rose et al., 2015; Sekayi & Kennedy, 2017). Following this recommendation, a combination of Hawai‘i career academy teachers, school leaders, and business partners formed the expert group for this Delphi study. Each population category has experiences with business collaboration in a Hawai‘i high school thereby equipping them to answer the research questions. Table 13 identifies the criteria for inclusion after population identification.

**Table 13**

*Requirements for Participation by Population Category*

| Category | Requirements |
|---|---|
| Teacher | Currently employed as a CTE teacher at a Hawai‘i high school and frequently implements work-based learning in some form in their classroom.<br><br>Minimum of two years of employment as a classroom teacher in a Hawai‘i career academy and implements some form of work-based learning in their classroom.<br><br>Minimum of two years of employment as a classroom teacher in a Hawai‘i high school that recently transitioned into the career academy model and implements work-based learning in some form in their classroom. |
| School leader | Minimum of two years of employment as a school leader in a Hawai‘i career academy.<br><br>Minimum of two years of employment as a school leader at a high school that recently transitioned into the career academy model. |
| Business partner | Two years of business collaboration experience with a Hawai‘i high school.<br><br>Minimum of two years of experience serving on a career academy board of directors. |

Due to the iterative data collection process required by the Delphi method, participant retention was a concern. Unless employed by the company conducting the Delphi study, research participation decreased by 40% in later rounds of data collection (Kosloski & Ritz, 2016; Mohr & Shelton, 2017; Omer Attali & Yemini, 2017). This factor led to the inclusion of Career and Technical Education (CTE) classroom teachers that are not currently employed in a Hawai‘i career academy model school. Collaborating with business partners and implementing a career-themed curriculum is most relevant to these educators’ curriculum standards. This point of relevance may increase participant longevity through the iterations required to complete the Delphi process. However, the classification of a CTE teacher is not mandatory.

This study could benefit from student insights as they are the population that will participate in the opportunities created by the business collaboration component in Hawai‘i career academies. Though valuable, students under the age of 18 are considered a vulnerable population. Obtaining the required consent forms and approval documentation would have significantly increase this study's timeline. Therefore, the inclusion of student participants was not possible for this study due to time and feasibility restraints. Including students' perspectives of the variations developed in this study presents a future research opportunity. Further exclusions include Hawai‘i school leaders and business partners that have not yet experienced the career academy model transition, and those teachers who have not yet sought the educational benefits of business partnerships or work-based learning. This experience is required to define individuals as business collaboration experts.

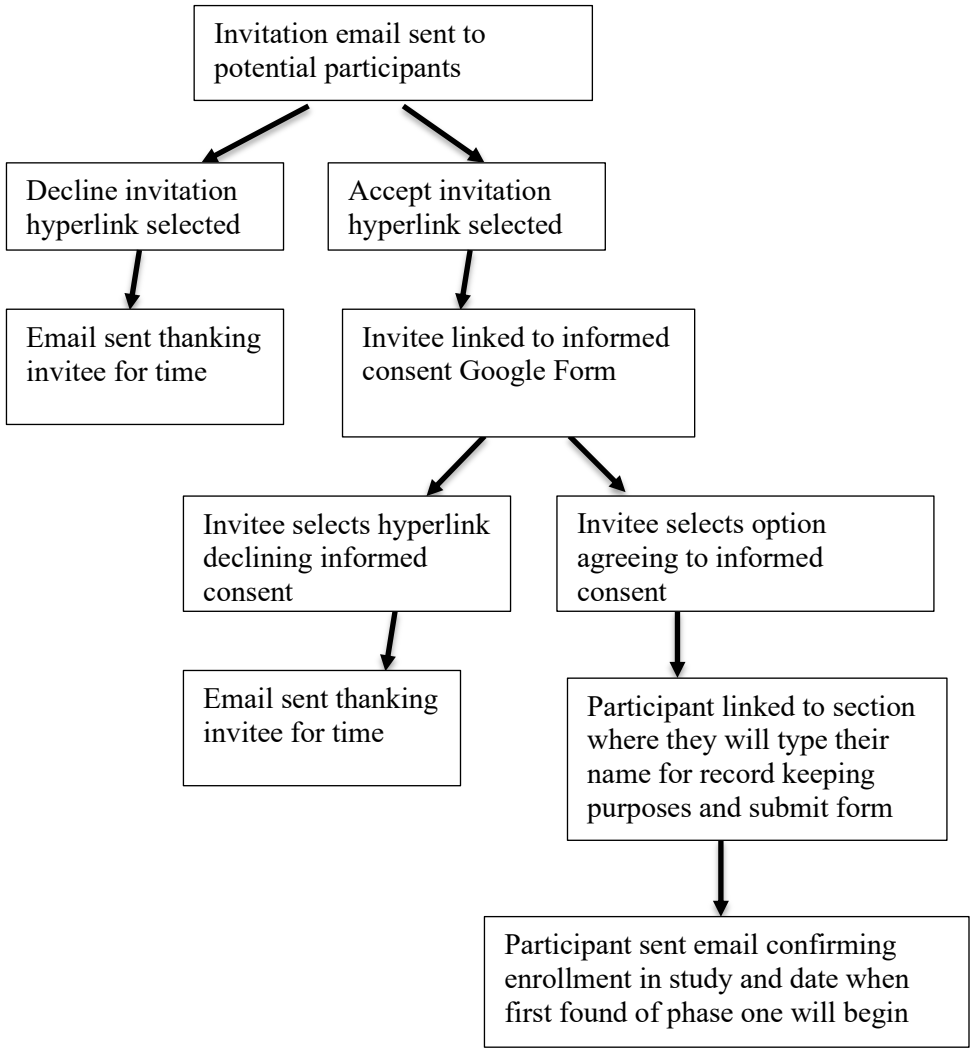
One aspect unique and universal to Delphi studies is that the participants form a panel of experts in the focus area of the study (Brady, 2015; Dalkey & Helmer, 1963; Mohr & Shelton, 2017; Omer Attali & Yemini, 2017). The need to form a panel of experts in the focus area of a Delphi study requires purposive sampling (Brady, 2015; Kosloski & Ritz, 2016; Omer Attali & Yemini, 2017). Snowball sampling is one strategy employed in Delphi studies to gain a full participant pool (Mohr & Shelton, 2017). The snowball sampling strategy is a participant recruitment strategy where current participants recommend additional study subjects (Patton, 2015). The snowball strategy allowed the accumulation of individuals outside of my sphere of acquaintances thereby reducing researcher bias.

The ideal sample size for this study was 15 participants, five from each of the three stakeholder groups. Determining the optimal group size for conducting a Delphi study is a topic of debate. Omer Attali and Yemini (2017) cite Rowe and Wright (2001) stating that the number of available experts should determine the sample size. This indeterminate definition allows for great flexibility regarding participant numbers. They then further cite Rowe and Wright's (2001) recommendation of between five and 20 experts to form a panel. Omer Attali and Yemini (2017) then cite additional Delphi researchers who suggest various participant sizes; between 15 and 30 (Clayton, 1997), and between 10 to 30 (Deardor, 2006). Dalkey and Helmer (1963) conducted their Delphi study, one of the first published hailed as the seminal Delphi work, with seven participants.

Contacting and inviting participants for this study occurred through email. Gmail is the official email system for the HSDOE and therefore the platform used for the participant recruitment process. Hyperlinks were embedded into the invitation email and consent form to streamline participant recruitment. Figure 1 details the recruitment process followed for this study. The invitation email, informed consent document, email thanking invitees for their time, and confirmation of enrollment email are found in the Appendices of this paper.

**Figure 1**

*Participant Invitation and Recruitment Process for Study*




The Delphi method does not lend itself to theoretical saturation as it is a strategy to form a consensus between experts. After forming the panel of experts, consideration of obtaining further outside data to seek new insights did not occur. Also, thematic coding is the recommended approach for Delphi data interpretation to formulate the consensus between experts (Brady, 2015; Kosloski & Ritz, 2016; Mohr & Shelton, 2017; Omer

Attali & Yemini, 2017). Repeated patterns must emerge to form the agreement sought by the Delphi method, thereby representing data saturation.

**Instrumentation**

Data collection for this study occurred using a Delphi instrument that was distributed using an online questionnaire platform. The Delphi method allows for great flexibility when choosing data collection tools. Surveys, questionnaires, and individual interviews are all forms of data collection found across Delphi studies (Brady, 2015; Dalkey & Helmer, 1963; Mohr & Shelton, 2017; Omer Attali & Yemini, 2017). In modern Delphi studies, online questionnaires are most common (Brady, 2015; Linstone & Turoff, 2011; Omer Attali & Yemini, 2017; Sekayi & Kennedy, 2017).

Online questionnaire platforms allow the inclusion of participants from geographically remote or diverse locations in a time and cost-effective manner (Brady, 2015; Linstone & Turoff, 2011; Omer Attali & Yemini, 2017; Sekayi & Kennedy, 2017). These factors opened participation in this study to career academy stakeholders around the Hawaiian Islands. In addition, online questionnaire platforms provide response time flexibility (Brady, 2015). This aspect best suited the participant's schedules as working professionals. Interviews also require a transcription that participants view for authentication (Patton, 2015). This interview authentication process requires an additional step from the participants which could affect their willingness to complete the study. Given the iterative nature of the Delphi process, participant attrition is already a concern (Brady, 2015; Mohr & Shelton, 2017).

An IC map template developed by Richardson (2004) influenced the Delphi instrument developed for this study. The IC mapping strategy was selected because it is a

tool that could be used to create and rank variations of an innovation with Hawai‘i career academy stakeholders (Hall & Hord, 1984; Hall & Loucks, 1978; Loucks, 1983). Removing the researcher from questionnaire development occurs when utilizing another's questionnaire. This decision also removed some aspects of personal bias. Richardson's (2004) questionnaire did not incorporate any of my background, sensitivities or experiences that could affect the data in the collection stage. However, the questions Richardson (2004) developed did not translate into the context of this study when applied to the Delphi instrument. His template provided the outline for the central research question and sub-questions driving this study. Then, the wording and format of Richardson's (2004) IC map template were augmented and altered to form an original questionnaire. In addition, three rounds per phase of data collection were added to adhere to the qualitative Delphi format presented by Sekayi and Kennedy (2017). The alterations may increase credibility by connecting to the results directly to the context of this study; reaching a reliable consensus when developing variations of the business collaboration component. The prompts and questions for each round of the Delphi instrument are located in Table 14. This study did not require the creation of alternative data collection sources. The use of different digital platforms occurred in the data collection, organization, and analysis stages. Discussion of these various platforms and their roles follows this section.

**Table 14**

*Delphi Instrument Prompts Per Round and Phase*

| Data Phase and RQ alignment → | Data Round → | Delphi instrument prompt |
|---|---|---|
| 1. Phase 1<br><br>RQ 1a: What key features of the business collaboration component will Hawai‘i career academy stakeholders develop to build variations that meet their specific needs? | Round 1 | P1R1. Generate a list of key features of the business collaboration component found in successful career academies. |
| | Round 2 | P1R2. The following themes emerged from the first round of data collection. Please review these themes and add any comments or concerns you might have with them or their wording or meaning. |
| | Round 3 | P1R3. Please rank each statement according to your level of endorsement. |
| 2. Phase 2<br><br>RQ 1b: What behavioral variations will Hawai‘i career academy stakeholders develop to support implementation of business collaboration key features? | Round 1 | P2R1. For each component identified in phase one, what are ideal and unacceptable behaviors of school leaders, business partners, and teachers that will help establish business collaborations in Hawai‘i’s career academies? |
| | Round 2 | P2R1. The following themes emerged from the first round of data collection. Please review these themes and add any comments or concerns you might have with them or their wording or meaning. |
| | Round 3 | P2R3. Please rank each statement according to your level of endorsement. |
| 3. Phase 3<br><br>RQ 1: What possible variations of the business collaboration component found in successful career academies will Hawai‘i career academy stakeholders develop to meet their specific needs? | Round 1 | P3R1. For each component identified in phase one, what are acceptable (not ideal, but not unacceptable) behavior variations of school leaders, business partners, and teachers that will help establish business collaborations in Hawai‘i’s career academies? |
| | Round 2 | P3R2. The following themes emerged from the first round of data collection. Please review these themes and add any comments or concerns you might have with them or their wording or meaning. |
| | Round 3 | P3R3. Please rank each statement according to your level of endorsement. |

## Procedures for Recruitment, Participation, and Data Collection

The Delphi instrument was the only data collection instrument for this study. I collected and analyzed all of the data for this study, and all data was collected

anonymously from study participants. Each round of data collection occured once and took place over a one week period. This required a three week period for each data collection phase. Including all three phases, data collection should have taken place over a nine week period. However, due to recruitment delays, data collection extended to 12 weeks. Each Delphi instrument round was sent to participants online through Google Forms. The Google Form was set to collect all data anonymously for the duration of the study. One option for recording and organizing data in Google Forms is transferring the responses to Google Sheets. Google Sheets is a spreadsheet program similar to Microsoft Excel but with fewer data reduction and analysis options. This Google Sheet was password protected so that I was the only person who could access the Delphi instrument results. Coding and analysis were conducted in the Google Sheet. The data collection tool and analysis platform for each phase and round of the Delphi instrument are detailed in Table 15. Table 15 also details the follow up questions for each data collection phase. The themed and summarized responses were returned to all participants for further comment and ranking even if they do not contribute in the first round of data collection. Participants exited the study via an email concluding the final phase and round of data collection. This email can be found in Appendix B.

**Table 15**

*Data Collection and Analysis Plan*

| Data Collection → | Data Tool → | Delphi instrument prompt with follow up data collection rounds → | Data analysis in Google Sheets |
|---|---|---|---|
| Phase 1 Google Form<br><br>RQ 1a: What key features of the business collaboration component will Hawai‘i career academy stakeholders develop to build variations that meet their specific needs? | Round 1 Google Form | P1R1. Generate a list of key features of the business collaboration component found in successful career academies. | P1R1. Inductive qualitative analysis: Thematic coding. Return summarized statements to participants. |
| | Round 2 Google Form | P1R2. The following themes emerged from the first round of data collection. Please review these themes and add any comments or concerns you might have with them or their wording or meaning. | P1R2. Inductive qualitative analysis: Thematic coding. |
| | Round 3 Google Form | P1R3. Please rank each statement according to your level of endorsement. | P1R3. Apply Thurstone scaling as qualitative ranking system: work toward reliable consensus |
| Phase 2 Google Form<br><br>RQ 1b: What behavioral variations will Hawai‘i career academy stakeholders develop to support implementation of business collaboration key features? | Round 1 Google Form | P2R1. For each component identified in phase one, what are ideal and unacceptable behaviors of school leaders, business partners, and teachers that will help establish business collaborations in Hawai‘i’s career academies? | P2R1. Inductive qualitative analysis: Thematic coding. Return summarized statements to participants. |
| | Round 2 Google Form | P2R2. The following themes emerged from the first round of data collection. Please review these themes and add any comments or concerns you might have with them or their wording or meaning. | P2R2. Inductive qualitative analysis: Thematic coding. |
| | Round 3 Google Form | P2R3. Please rank each statement according to your level of endorsement. | P2R3. Apply Thurstone scaling as qualitative ranking system: work toward reliable consensus |

| Data Collection → | Data Tool → | Delphi instrument prompt with follow up data collection rounds → | Data analysis in Google Sheets |
|---|---|---|---|
| Phase 3 Google Form<br><br>RQ 1: What possible variations of the business collaboration component found in successful career academies will Hawai‘i career academy stakeholders develop to meet their specific needs? | Round 1 Google Form | P3R1. For each component identified in phase one, what is acceptable (not ideal, but not unacceptable) variations of behaviors of school leaders, business partners, and teachers that will help establish business collaborations in Hawai‘i’s career academies? | P3R1. Inductive qualitative analysis: Thematic coding. Return summarized statements to participants. |
| | Round 2 Google Form | P3R2. The following themes emerged from the first round of data collection. Please review these themes and add any comments or concerns you might have with them or their wording or meaning. | P3R2. Inductive qualitative analysis: Thematic coding. |
| | Round 3 Google Form | P3R3. Please rank each statement according to your level of endorsement. | P3R3. Apply Thurstone scaling as qualitative ranking system: work toward reliable consensus |

**Data Analysis Plan**

The data collection and analysis plan are detailed in Table 15. A combination of Google Forms and Google Sheets were used as the data collection, coding, and organizational platforms. Each round of questions were sent to participants online through Google Forms. One option for data recording and organizing responses in Google Form is transferring the responses to Google Sheets. Google Sheets is a spreadsheet program similar to Microsoft Excel but with fewer data reduction and analysis options. Each round of data was stored in the same Google Sheets workbook, or file, but separated into different worksheets. Worksheets are the tabs separating documents at the bottom of the workbook. Each worksheet and Google Forms name

corresponded with the data collections phase number and round letter. For example, Phase 1 Round 1 of data collection had a Google Form titled Phase 1 Round 1, so the worksheet was also named Phase 1 Round 1. This pattern continued for all three rounds of data collection. The coding and analysis of data also occurred in the Google Sheets workbook.

Little guidance exists for data analysis in solely qualitative Delphi studies (Brady, 2015; Sekayi & Kennedy, 2017). This flexibility yields few guidelines to determine optimal participant size, data collection tools, or means for data interpretation when using the Delphi method. An inductive qualitative process was applied to analyze data in this study. The coding process consisted of examining that data for convergences, coding the convergences, theming them, then adding the deviant cases into the themed responses. To begin the coding process, all responses from a single prompt or question were copied into a new Google Sheets cell. Then, similar responses were rearranged sequentially using internal homogeneity as a measure. Seeking internal homogeneity allowed the inclusion of not just word repetitions but also synonyms and like phrasing. On the recommendation of Patton (2015), these similarities were then color-coded to find convergence. A term or short phrase for these similarities was then recorded in a new cell to the right of the combined responses forming the codes. Then, themes emerged from the codes and were recorded. To ensure the codes and themes were supported objectively, the data was revisited and revised on several occasions as recommended by Ravitch and Carl (2016). This reciprocal process produced Patton's (2015) constant comparison strategy. Identifying convergent data alone does not complete the Delphi process. Unique, or

deviant cases, must be added to the themed responses to finalize the data collection for each round.

## Issues of Trustworthiness

### Credibiltiy

Both triangulation and member checking are strategies that increase credibility (Ravitch & Carl, 2016). A member checking technique was applied in the second round of each data collection phase. In Round 2, participants were asked to review the themes that emerged in Round 1. They were then asked to add comments or concerns they might have had regarding the wording or meaning of the themes. Triangulation was achieved in this study by including multiple participants from three different stakeholder groups. I will also keept a research journal from the beginning to the end of this study. The research journal further increase credibility, transferability, and dependability while also decreasing bias (Ortlipp, 2008).

### Transferability

Findings from this study may not be directly transferable to career academies in other states due to the unique qualities of Hawai‘i career academies. However, transferability may be achieved by supplying a rich description of the research design and data collection process (Ravitch & Carl, 2016). This detailed description was developed using the research journal method mentioned above. Using the qualitative Delphi method to crate an IC map is a strategy that might be applied in a variety of other contexts. The IC map strategy that I used in this study may be significant to the field of education because it could be a method for developing variations of career academy components

that meet the specific needs of any school. The research design might also be replecated to create variations of other career academy components for Hawai‘i career academies.

**Dependability**

Ensuring alignment in a study is one strategy to increase dependability (Ravitch & Carl, 2016). Table 9 illustrates the alignment between the conceptual framework, research questions, data source, data analysis technique, and significance of the findings. Table 12 illustrates the alignment between the research questions, Delphi instrument prompts, and data analysis techniques. The member checking process and triangulation describe previously will also increase dependability (Ravitch & Carl, 2016). Dependability will also be increased by retaining participant anonymity. The anonymity guaranteed by the Delphi method supports an inclusive and equitable environment and negates the biases inherent in hierarchical employment systems or other negative group influences (Dalkey & Helmer, 1963; Mohr, & Shelton, 2017; Omer Attali & Yemini, 2017).

**Confirmability**

Several strategies discussed previously will help increase confirmability: (a) triangulation, (b) member checking, and (c) keeping a research journal. The constant comparison technique was also applied to my data analysis process. This strategy is also reflexive, focusing on ensuring coding consistency and accuracy (Patton, 2015), which will increase confirmability.

**Ethical Procedures**

As indicated in the consent form (see Appendix B), participation in this study was voluntary, and at any time, participants may have ended their involvement. However, a

specific individual's responses was not identifiable due to the anonomous nature of the data collection process. Remove an individual's responses submitted before withdrawing from the study was not possible. This detail was stated in the informed consent form. All participants received invitations emails (see Appendix A), which stated that this research will be used to fulfill the Walden Univerisity requirements for a doctoral degree. In addition, all participants were provided with informed consent forms (see Appendix B). In alignment with qualitative Delphi procedures, all participant's identities and responses remained confidential. Participant and response anonymity was maintained as the consensus was reached. I was the only person that had access to raw data, and all Delphi instrument responses remained confidential. If a direct quote was used for data analysis, pseudonyms will were used. All data was stored on a password-protected laptop and Google Drive. All data will be stored for five years in accordance with Walden University's doctoral program requirements. All files will be deleted after the five-year time allotment. There will not be any outside ethical considerations, no conflicts of interest, and no use of participation incentives. The Walden Institutional Review Board approved this study before participant recruitment.

## Summary

Chapter three detailed the qualitative Delphi approach that was used to develop the IC maps for Hawai‘i career academies to provide possible variations of the business collaboration component found in successful career academies. The research questions and how they relate to the Delphi instrument phases and rounds, research design method, method rationale, my role as the researcher, participant selection logic, instrumentation, and issues of trustworthiness are also described. Qualitative data was collected using an

online questionnaire platform for the Delphi instrument. The Delphi instrument was original, but followed the IC map guidelines presented by Richardson (2004) as well as the qualitative Delphi process presented by Sekayi and Kennedy (2017). The qualitative Delphi process was the best approach for this study. This approach provided participation opportunities for Hawai‘i career academy stakeholders in geographically diverse and remote settings across the Hawaiian Islands. The qualitative Delphi process also equally valued the experiences, expertise, and perspectives of different Hawai‘i career academy stakeholder groups.

# Chapter 4: Results

## Introduction

The purpose of this qualitative Delphi study was to develop possible variations of the business collaboration component found in successful career academies that meet the needs of Hawai‘i’s career academies. I used the Delphi method to develop key features of the business collaboration component and build IC maps for each key feature. Contributions from Hawai‘i career academy teachers, school leaders, and business partners were used to develop and reach a reliable consensus for the IC map components. This study centered around the following research questions:

RQ 1. What possible variations of the business collaboration component found in successful career academies will Hawai‘i career academy stakeholders develop to meet their specific needs?

RQ 1a. What key features of the business collaboration component will Hawai‘i career academy stakeholders develop to build variations that meet their specific needs?

RQ 1b. What behavioral variations will Hawai‘i career academy stakeholders develop to support implementation of business collaboration key features?

This chapter contains the following sections; setting, demographics, data collection, data analysis, evidence of trustworthiness, and results.

## Setting

This study was conducted in the United States, in the state of Hawai‘i. The Hawai‘i State Research and Data Governance Board provided verbal approval to begin data collection in April of 2020. However, official permission from the Hawai‘i State Research and Data Governance Board was not received until September 1st, 2020. This

delay was caused by overwhelming demands on the superintendent's time due to the onset of the COVID-19 pandemic. The COVID-19 pandemic extended the data collection timeline of this study and may have also affected participant recruitment and contributions.

All participants were recruited from Hawai‘i career academies and businesses that collaborate with Hawai‘i schools. At the time of this study, each of these demographics was coping with extreme steresses caused by the COVID-19 pandemic. Participants may have experienced concerns or fear for the safety and health of themselves and their loved ones. Lockdowns and state-wide restrictions caused frequent changes in home and work environments, plus financial strains due to layoffs and business closures. In December of 2020, study participation and the quality of contributions waned. This may have been a result of furloughs for all educators and the pending expiration date of the Pandemic Unemployment Assistance program. I extended the timeframe of the study for several data collection rounds and paused data collection over the Christmas and New Year holidays to counter these issues.

Data collection began on October 25th, 2020, and ended on January 17th, 2021. Google Forms, an online questionnaire tool, was used to deliver the Delphi instrument. All participants completed the Delphi instrument fully online, and they never met face-to-face. Participant contributions, including suggestions for edits and ranking, were not associated with any information that might identify a participant. By using this process, I could assure participant confidentiality.

## Demographics

All participants who self-selected to participate in this study represented three Hawai‘i stakeholder groups. Sixteen participants contributed to this study. They were either Hawai‘i high school teachers, school leaders, or business partners that met at least one of the criteria detailed in Chapter 3 (Table 13). Teachers were required to have at least 2 years of experience implementing work-based learning in their classroom at a Hawai‘i career academy or high school. School leaders were required to have a minimum of 2 years of experience at a Hawai‘i career academy or school that recently transitioned to the career academy model. Business partners were required to have 2 years of experience as a business collaborator with a Hawai‘i high school or as an academy advisory board member. Six teachers, six school leaders, and four business partners formed the expert group of participants for this study. The only demographic information I collected for this study was the island on which the participant was employed and the stakeholder group to which they belonged.

## Data Collection

### Recruitment of Participants

I used purposeful and snowball sampling to identify potential participants that met the selection criteria. All participant communication was conducted via email. The participant criteria were included in the invitation email (see Appendix A). The invitation email also included a link to the informed consent Google Form (see Appendix B). This process streamlined enrollment by allowing participants to directly enroll in the study without requiering additional communication. The informed consent detailed the nine

rounds of data collection required to complete this study. Participants were also informed of plans to ensure participant confidentiality throughout the data collection process.

Due to conditions set by the Hawai‘i Data Research Governance Board, the invitation letter was sent to school administrators with a request that they forward my invitation to potential DOE-employed participants. The invitation for this study was initially sent to 72 administrators at 18 high schools across five Hawaiian Islands. The schools were either career academies or contained well-developed CTE and career pathway programs.

Disruptions caused by the COVID-19 pandemic may have affected the snowball sampling technique. Of the 72 invitation emails that were sent, only 12 read receipts were received. The timeline to recruit participants was extended from 3 weeks to 6 weeks, and multiple follow-up emails were sent to administrators. Five participants from various schools were recruited through this process. After requesting permission from the Hawai‘i Data Research Governance Board and the Walden University IRB, my current school of employment was added to the potential participant pool. This addition resulted in the recruitment of 12 more participants.

Sixteen business partners associated with three different career academy high schools on Island A were also contacted. Four business partners were recruited by snowball sampling. Invitation emails were sent to 12 business partners on a list supplied by a career academy coordinator located at one of my approved schools on Island A. Purposeful sampling was employed via searching websites of the career academies on the approved list of contacts for this study. Two schools listed business partners' names on

their academy advisory boards, and invitation emails were sent. However, this strategy did not yield additional participants.

Seventeen experts initially agreed to participate in this study and selected "I consent" on the informed consent form; these experts included four business partners, seven school leaders, and six teachers. The target population for this study was 15 participants with an equal distribution of five from each expert group. Unable to recruit five business partners, I instead filled the study roster with six school leaders. One school leader and one teacher were held in reserve in the event that a participant from either group withdrew from the study or ceased contribution. One teacher transferred to a charter school at the end of the first phase of data collection. The email contact that this teacher supplied for the study became invalid upon their transfer, and no alternate email address was supplied. This teacher was replaced with the auxiliary teacher at the beginning of Phase 2. As contributions from participants began to decrease in phase two, the auxiliary school leader was contacted but withdrew from the study at that time.

**Delphi Instrument**

Data collection began on October 25th, 2020 and ended on January 17th, 2021. I used Google Forms to develop the Delphi instruments. The Delphi instrument was sent to all participants via a hyperlink in an email. All data were collected online over nine rounds of data collection. The nine rounds were separated into three phases, each consisting of three rounds. The nine Delphi instruments that were sent to participants are found in Appendix F. In each Delphi instrument I began by asking the participant to identify their stakeholder group. Then, the Delphi instrument continued to prompts pertaining to the data collection round.

Sixteen participants contributed to this study over the nine rounds of data collection; six teachers, four business partners, and six school leaders. Table 16 details the number of participants that contributed from each stakeholder group in each round of data collection and the length of each data collection round.

**Table 16**

*Participant Contributions Over Data Colleciton Rounds*

| | Phase 1 | | | Phase 2 | | | Phase 3 | | |
|---|---|---|---|---|---|---|---|---|---|
| Stakeholder group | Round 1 | Round 2 | Round 3 | Round 1 | Round 2 | Round 3 | Round 1 | Round 2 | Round 3 |
| Teaceher | 3 | 4 | 4 | 4 | 3 | 4 | 3 | 3 | 2 |
| School leader | 6 | 6 | 5 | 4 | 5 | 6 | 6 | 4 | 5 |
| Business partner | 3 | 2 | 1 | 3 | 2 | 1 | 2 | 2 | 1 |
| Total participants | 12 | 12 | 10 | 11 | 10 | 11 | 11 | 9 | 8 |
| Round Duration | 1 week | 1 week | 1 week | 1 week | 1 ½ weeks | 1 week | 1 week | 2 ½ weeks | 2 weeks |

The data collection rounds for each phase were modeled using Sekayi and Kennedy's (2017) qualitative Delphi process: Round 1: gather initial responses in an open-ended brainstorming session and thematically code the data. Round 2: return controlled feedback to participants, collect additional input, and modify initial responses based on additional input. All data from Round 3: apply non-numerical, Thurstone scaling, as the ranking system to form the reliable consensus.

### Variations in Data Collection

In Round 2 of Phase 2, the breadth and depth of participant responses began to result in several subcategories for each identified key feature. As a result, the Delphi instruments began extending beyond the intended 20 to 30 minute completion time. Several participants commented that the extended time required to complete the Delphi instrument rounds affected their ability to continue participation in the study. At this time, some irregularities in participant responses began to emerge. In Phase 3, Round 1, one participant began placing a period for their responses about halfway through the Delphi instrument. Another participant began putting the phrase "same as above" in response areas. One participant requested that I chunk the Delphi instrument into multiple parts that could be completed in shorter time intervals. I complied with this request and chunked each Phase 3 Delphi instrument rounds into three separate portions; Part A, Part B, and Part C. This gave participants the ability to either complete the Delphi instrument round in separate sittings or all at once.

## Data Analysis

All data gathered from the Google Form were populated into Google Sheets. Round 1 and Round 2 were manually coded using inductive qualitative analysis and thematic coding. In Round 3, the following ranking scale was applied: (a) I do not endorse this statement, (b) I minimally endorse this statement, (c) I moderately endorse this statement, or (d) I strongly endorse this statement. The practice of establishing a minimum percentage threshold to define consensus was then applied (Jünger et al., 2017; Sekayi & Kennedy, 2017). I defined consensus as statements that were strongly or moderately endorsed by 70% of participants. Statements that did not reach the minimum

percentage threshold were excluded from the subsequent data collection phase but reported in this study's results section (Sekayi & Kennedy, 2017). I repeated this process repeated for each phase.

## Evidence of Trustworthiness

### Credibility

Both triangulation and member checking are strategies that increase credibility (Ravitch & Carl, 2016). I applied member checking techniques in the second round of each data collection phase. In Round 2, participants were asked to review the summarized responses from Round 1. Expert participants were asked to add comments or concerns they might have regarding the wording or meaning of the themes. Participant suggestions for edits or additions were incorporated and presented to participants in Round 3 for endorsement. Triangulation was achieved by including multiple participants from three different stakeholder groups.

### Transferability

Findings from this study may not be directly transferable to career academies in other states due to the unique qualities of Hawai‘i career academies. In addition, all who participated in this study were employed on one island in Hawai‘i. This factor may affect the transferability of data to career academies on the other Hawaiian Islands. However, transferability may be achieved by supplying a rich description of the research design and data collection process (Ravitch & Carl, 2016). A detailed description was developed using the research journal method. Using the qualitative Delphi method to crate an IC map is a strategy that might be applied in a variety of other contexts. The IC map strategy that I used in this study may be significant to the field of education because it could be a

method for developing variations of career academy components that meet the specific needs of any school. The research design might also be replecated to create variations of other career academy components for Hawai‘i career academies.

**Dependability**

Ensuring alignment in a study is one strategy to increase dependability (Ravitch & Carl, 2016). Table 9 illustrates the alignment between the conceptual framework, research questions, data source, data analysis technique, and significance of the findings. Table 12 illustrates the alignment between the research questions, Delphi instrument prompts, and data analysis techniques. Ravitch and Carl's (2016) member checking process and triangulation described previously also increased dependability. Dependability was also increased by retaining participant anonymity. The anonymity guaranteed by the Delphi method supports an inclusive and equitable environment and negates the biases inherent in hierarchical employment systems or other negative group influences (Dalkey & Helmer, 1963; Mohr & Shelton, 2017; Omer Attali & Yemini, 2017).

**Confirmability**

I previously discussed several strategies that helped increase confirmability: (a) triangulation, (b) member checking, and (c) keeping a research journal. I applied constant comparison to the data analysis process. Patton (2015) stated that this strategy is also reflexive, focusing on ensuring coding consistency and accuracy, which increases confirmability.

## Results

In Phase 1, expert participants developed eight key features of the business collaboration component. Over Phases 2 and 3, 255 behavioral variations were developed and organized into 20 subcomponents. An IC map was developed for each subcomponent resulting in 20 IC maps. Consensus and inclusion in the IC maps were determined by a behavior receiving a strong or moderate endorsement of 70% or greater. By the final round of data collection, 242 behaviors reached the consensus threshold and were included in the IC maps. The ideal, acceptable, and unacceptable behavioral variations were aligned by creating 83 overarching concepts. The evolution of all behavioral variations is found in Appendices G through Z.

### Phase 1: Key Features of the Business Collaboration Component

In the first phase of data collection, stakeholders were tasked with identifying the key features of the business collaboration component. This task corresponded with RQ 1a: What key features of the business collaboration component will Hawai‘i career academy stakeholders develop to build variations that meet their specific needs?

#### *Round 1*

The Round 1 Delphi instrument asked participants to generate key features of the business collaboration component found in successful career academies. Eight key features were formed from 67 contributions made by 12 participants. The following process was used to develop the fey features. Each participant's response was copied into a neighboring cell in Google Sheets. Responses were then broken into bulleted lists to clarify different thoughts. Codes were assigned to the bulleted statements forming overarching topics. For example, Teacher two provided the following initial response:

> Faculty visits to business partners to form open and consistent communication between both parties, advisory boards to share knowledge of school's academy model, providing a variety of student experiences like guest speakers, job shadowing or internships with structure and clear outcomes, school participates in business partner events like beach clean ups or volunteer at employee events like family fairs, socials between business & school.

Teacher two's responses were broken into the following bulleted list and assigned a topic. The phrase in parentheses at the end of each bulleted phrase is the assigned topic.

- Faculty visits to business partners to form open and consistent communication between both parties (faculty externships)
- Advisory boards to share knowledge of school's academy model (advisory boards)
- Providing a variety of student experiences like guest speakers (work-based learning)
- Job shadowing or internships with structure and clear outcomes (student internships)
- School participates in business partner events like beach clean ups or volunteer at employee events like family fairs (students at business events)
- Socials between business & school (students at business events)

Responses assigned to the same topic were then gathered into a new cell. The data in each cell were examined for word repetition, synonyms, or like-phrasing to identify convergences. The convergences were summarized into items. Items from the same

category were combined to form the key features generating the Round 1 responses. For example, statements from 10 different participants were assigned the topic student internships, student mentorships, or both. Statements such as “authentic experiences from the industry for internships or mentorship” (School Leader 4) and “job shadowing or internships with clear outcomes” (Teacher 2) were summarized into two student internship/mentorship items; (a) providing authentic career experiences, and (b) ensuring structure in the program. Combining these two ideas, Key Feature 1 became the following; Structured student internship/mentorship programs providing authentic career experiences. Eight key features were developed using this method. All key features developed in Phase 1, Round 1 are listed in Table 17.

***Round 2***

In Round 2, participants reviewed the key features developed in Round 1. Several revisions, comments, or questions were submitted for each key feature. All submissions were examined for similarities, like phrasing or variations as described in Phase 1. Participant recommendations were incorporated to clarify the scope of the key features. For example, two participants suggested adding a way to measure employability and soft skills in Key Feature #5. School Leader 4 generally commented that the key features were not clearly defined and left “too much to unpack.” They recommended forming a sentence for each key feature. The revised Round 2 responses are listed in Table 18. The revised responses were presented to participants in Round 3.

***Round 3***

In Round 3, participants ranked each key feature by choosing their level of endorsement. All key features reached the minimum endorsement threshold of 70%. This

result indicated that expert participants supported the inclusion of all key features in Phase 2. Table 17 details the Phase 1 results for the Rounds 1 brainstorming responses, the revised key features, and the Round 3 strong or moderate endorsement percent.

**Table 17**

*Key Features of Business Collaboration Component Delphi Results*

| R1 Brainstorming: key features | R2 Revised key features | R3 Strong/ moderate % |
|---|---|---|
| 1. Structured student internship/mentorship programs providing authentic career experiences. | Structured Student Internship/Mentorship Program: Schools and business partners collaborate to provide students with authentic experiences and training in career fields. | 100 |
| 2. Faculty externships with business partners increasing communication of industry needs. | Faculty Externships: Business partners communicate current industry trends, demands, and expectations to schools through faculty externships with business partners. | 90 |
| 3. Schools and business partners co-create industry/career themed curriculum that allow a seamless transition between high school to either college courses or career advancement. | Co-Created Career Themed Curriculum: Students engage with a cross-curricular career/industry-themed curriculum that is co-created by schools and business partners. The curriculum is problem/project-based and aligned with current industry and community needs as well as academic standards. | 90 |
| 4. Co-develop Employability/Soft Skills applicable to the academy's career/industry. | Co-develop Employability Skills for Students: School and business partners co-develop employability skills applicable to the academy's industry and ways to evaluate student performance with these skills. | 90 |

| R1 Brainstorming: key features | R2 Revised key features | R3 Strong/ moderate % |
|---|---|---|
| 5. Provide work-based learning opportunities (guest speaking, judging student projects, mock interviews, etc.) raising awareness of current industry trends helping students plan and execute their post-high school goals. | Work-Based Learning Opportunities: Schools and business partners collaborate to provide work-based experiences (guest speakers, capstone courses, mock interviews, etc.) that help students plan and execute their post-high school goals. | 100 |
| 6. 6.Students participate in business partner sponsored events (beach clean-ups, family fairs, etc.) to form external relationships with business partners. | Students Participate in Business Partner Events: Students are offered service or volunteer opportunities at business partner events (job fairs, beach clean-ups, family fairs, etc.). | 100 |
| 7. Form a shared vision of outcomes, parameters, and purposes for the partnership | Shared Vision for Partnership: Schools and business partners define outcomes, parameters, and purposes for the partnership. | 100 |
| 8. Form academy advisory boards to develop career pathways within the academy. | Academy Advisory Boards: Stakeholders form advisory boards to develop or evolve career academies and pathways that reflect current industry trends and school needs. | 90 |

**Phase 2: Ideal and Unacceptable Behavioral Variations**

In phase two, participants generated ideal and unacceptable behaviors for each key feature developed in Phase 1. This task correlated with RQ 1b: What behavioral variations will Hawai‘i career academy stakeholders develop to support the implementation of business collaboration key features?

***Round 1***

The Round 1 Delphi instrument asked participants to generate a list of ideal and unacceptable behaviors for each key feature. Eleven participants made contributions. The contributions were coded using the same process detailed in Phase 1: Round 1. After

coding, 93 ideal behaviors and 87 unacceptable behaviors were generated for the eight key features. The volume and diversity of behaviors generated for some key features warranted additional organization. Four subcomponents were developed for Key Feature 1; collaboration, communication, student participation in program, and mentors. Two subcomponents were developed for Key Feature 2; during externship and planning and preparation. This organizational strategy began to bring structure and context to the ideal and unacceptable behaviors.

***Round 2***

In Round 2, 10 participants reviewed the ideal and unacceptable behaviors developed in Round 1. Twenty-six behaviors received suggestions for revisions or were questioned for clarity. All participant contributions were examined for similarities, like phrasing or variations. Teacher 3 commented that there were too many items to review and suggested making the Delphi instrument shorter by consolidating or removing behaviors. Considering this feedback, several behaviors were consolidated to add clarity and reduce redundancy. The number of ideal behaviors was reduced to 71, and unacceptable behaviors were reduced to 80. The revised behaviors were presented to participants in Round 3.

***Round 3***

In Round 3, participants ranked each ideal and unacceptable behavior by choosing their level of endorsement. Five behaviors did not reach the consensus threshold and were removed from the Delphi instrument for Phase 3. The remaining behaviors were reexamined for similarities and consolidated to reduce redundancy. Seventeen additional subcomponents were created to increase cohesion and context between the ideal and

unacceptable behaviors, forming 20 IC map drafts. Table 18 details the subcomponents for each key feature.

**Table 18**

*Subcomponents Per Each Key Feature*

| Key feature | Subcomponents |
|---|---|
| 1. Structured student internship/ mentorship program | Collaboration<br>Communication<br>Application process<br>Student participation<br>Mentors |
| 2. Faculty externships | During externship<br>Planning and preparation |
| 3. Co-created career themed curriculum | Planning and collaboration<br>Stakeholder contributions |
| 4. Co-develop employability skills for students | Collaboration and communication<br>Development and implementation |
| 5. Work-based learning opportunities | Opportunity development<br>Stakeholder involvement<br>Student interactions |
| 6. Students participate in business partner events | Stakeholder roles<br>Preparing students |
| 7. Shared vision for partnership | Establish Vision<br>Vision application |
| 8. Academy advisory boards | Member roles<br>Communication and relationships |

IC map drafts were generated for each subcomponent to align ideal and unacceptable behaviors with shared ideas. After consolidation and alignment, 70 ideal behaviors and 60 unacceptable behaviors remained. Not all behaviors corresponded to a counter behavior due to their simultaneous formation leaving gaps in the IC map drafts. Filling the gaps in the IC maps was addressed in Phase 3. Due to further revisions and additions, Phase 2 data will be presented with the Phase 3 data.

**Phase 3: Acceptable Behaviors and Behavioral Variations**

In Phase 3 of data collection, expert participants completed the IC maps by forming acceptable behaviors for each key feature and revising, deleting, or adding ideal and unacceptable behaviors. These tasks aligned with RQ 1: What possible variations of the business collaboration component found in successful career academies will Hawai‘i career academy stakeholders develop to meet their specific needs? IC map drafts were included in all Phase 3 Delphi instruments to aid the development of corresponding ideal, acceptable, and unacceptable behaviors.

***Round 1***

The Round 1 Dephi instrument first asked expert participants to generate a list of acceptable behaviors for each subcomponent of each key feature. Then, participants reviewed the ideal and unacceptable behaviors and were asked to suggest additions, deletions, or edits. The IC map drafts formed after Phase 2, Round 3 were included in the Phase 3 Round 1 Delphi instrument. Including the IC map drafts illustrated the current alignment and gaps between ideal and unacceptable behaviors and provided a reference for acceptable behavior formation. Eleven expert participants made contributions in Round 1. After applying the same coding process described previously, 81 acceptable behaviors were developed. Nine alterations to ideal and unacceptable behaviors were also submitted, resulting in 80 ideal behaviors and 68 unacceptable behaviors. While cohesion was forming in the behavioral variations, gaps still remained in the IC map drafts.

***Round 2***

In Round 2, expert participants reviewed the acceptable behaviors developed in Round 1 and were asked to suggest additions, deletions, or edits. The IC map drafts

included in Round 2 aligned ideal, acceptable, and unacceptable behaviors by concepts that spaned the behavioral variations. This alignment also illustrates gaps that still existed in the IC maps. To complete the IC maps, expert participants were also allowed to suggest additions, edits, or deletions to the ideal and unacceptable behaviors. Nine participants submitted contributions.

### *Round 3*

The IC map draft for the subcomponents of each key feature was presented to participants in Round 3. Expert participants then ranked each acceptable behavior by choosing their level of endorsement. Participants also had a final opportunity to remove any ideal or unacceptable behaviors by stating a moderate or no endorsement. Eight expert participants contributed to Round 3.

#### Key Feature 1: Structured Student Internship/Mentorship Program

#### *Collaboration*

The first IC map contains the behavioral variations for the collaboration subcomponent of the structured student internship/mentorship program key feature (Table 19).

**Table 19**

*Structured Student Internship/Mentorship Program: Collaboration Subcomponent IC Map*

| 1. Structured Student Internship/Mentorship Program: Schools and business partners collaborate to provide students with authentic experiences and training in career fields. | | | |
|---|---|---|---|
| Subcomponent: Collaboration | | | |
| Overarching concepts | Ideal behaviors | Acceptable behaviors | Unacceptable behaviors |
| 1. Collaborative relationships | Strong collaborative relationships between business partners and schools are fostered by defining a working relationship and trusting in each other's intent. | Collaborative relationships are established through open and consistent communication. Stakeholders use disagreements as an opportunity to determine working structures for the partnership. | Stakeholders are skeptical of each other's intent and induce toxic conflict. |
| 2. Accountability and commitment to plan | Stakeholders are committed to an agreed-upon plan whether or not they are in total consensus. They take accountability and follow through with agreements. | Stakeholders are willing to compromise and accept a decided plan though concerns or disagreements with portions are expressed. They are held accountable for following through with agreements. | Stakeholders are unwilling to compromise and lack commitment to a plan. They do not follow through with identified responsibilities and agreements. |
| 3. Internship/ mentorship arrangement | Business partners and school personnel regularly collaborate to approve and arrange student internships/mentorship opportunities. | Schools initiate internship/mentorship opportunities as the need arises. Student participation occurs with both business partners and school knowledge/approval. | Arrangements for internships/mentorships are made without either business partner or school knowledge/ approval. |

Expert participants developed three ideal, acceptable, and unacceptable behaviors that were aligned using the overarching concepts collaborative relationships, accountability and commitment to plan, and internship/mentorship arrangement.

The evolution of each behavior for the subcomponent can be found in Appendix G: Tables G1, G2, and G3. Table G1 (ideal), and Table G2 (unacceptable) includes the Phase 2 Round 1 brainstorming responses, Phase 2 Round 3 strong or moderate endorsement percent, Phase 3 revisions, and the Phase 3 Round 3 strong or moderate endorsement percent.

In Phase 2 Round 2, expert participants suggested revising ideal behaviors #2a and #2b (Table G1). In Phase 2 Round 3, all behaviors received a strong or moderate endorsement of 70% or greater. In Phase 3, behaviors #1a, #1b, and #1c were combined. Behaviors #2a and #2b were combined, and participants suggested adding the follow-through with agreements portion. Expert participants developed behavior #3 in Phase 3. In Phase 3 Round 3, all ideal behaviors were strongly or moderately endorsed.

In Phase 2 Round 3, all unacceptable behaviors received a strong or moderate endorsement of 70% or greater (Table G2). In Phase 3, behaviors #1a and 1b were combined. Behaviors #2a and #2b were combined, and five participants suggested adding the following portion; they do not follow through with identified responsibilities and agreements. In Phase 3 Round 3, all participants strongly or moderately endorsed unacceptable behaviors.

Table G3 contains the acceptable behavior developed in Phase 3 for the collaboration subcomponent. The table includes the Round 1 brainstorming responses, Round 2 revised behaviors, and the Round 3 percentage of strong or moderate endorsement. In Round 2, expert participants suggested revisions to behaviors #1 and #2. Participants developed behavior #3 in Round 2. In Round 3, all behaviors received a strong or moderate endorsement of 70% or greater.

### *Communication*

The second IC map contains the behavioral variations for the communication subcomponent of the structured student internship/mentorship program key feature (Table 20).

**Table 20**

*Structured Student Internship/Mentorship Program: Communication Subcomponent IC Map*

| 1. Structured Student Internship/Mentorship Program: Schools and business partners collaborate to provide students with authentic experiences and training in career fields. | | | |
|---|---|---|---|
| Subcomponent: Communication | | | |
| Overarching concepts | Ideal behaviors | Acceptable behaviors | Unacceptable behaviors |
| 1. Language, terminology, and communication | Common language and terminology are created to foster regular and consistent communication between stakeholders. | Common language and terminology are outlined as the need arises. Regular communication between stakeholders occurs. | Communication is neither prompt nor efficient. The lack of a common language and terminology causes miscommunication and misunderstandings. |
| 2. Discussion and communication | Open-minded discussions of all ideas and issues occur with room for respectful, constructive conflict. | Stakeholders can agree to disagree and reach common ground. | Retention of ideas and issues occur as a result of passive-aggressiveness. |
| 3. Expectations and outcomes | Discussions are student-centered focusing on realistic expectations and outcomes for students. Expectations for the program are clearly communicated to students. | Outcomes are developed through student-centered discussions, but their feasibility is untested. Program expectations are shared with students. | Decisions are not student-centered. Students are unaware of program expectations. |
| 4. Student growth | Student growth is analyzed and discussed regularly. These discussions drive decisions about changes to student placement in the program. | Stakeholders have opportunities to discuss student growth. Student growth is a factor when determining potential changes to student placement in the program. | There is no communication about student growth or changes to student placement in the program. |

The evolution of each behavior for the subcomponent can be found in Tables H1, H2, and H3 in Appendix H. Expert participants developed four ideal, acceptable, and unacceptable behaviors that were aligned using the following overarching concepts; (a) language, terminology, and communication, (b) discussion and communication, (c) expectations and outcomes, and (e) student growth. Tables H1 (ideal) and H2 (unacceptable) include the Phase 2 Round 1 brainstorming responses, Phase 2 Round 3 strong or moderate endorsement percent, Phase 3 revisions, and the Phase 3 Round 3 strong or moderate endorsement percent.

No revisions were suggested in Phase 2 Round 2 for ideal and unacceptable behaviors. In Phase 2 Round 3, experts consensually agreed to all ideal behaviors with a strong or moderate endorsement of 70% or greater (Table H1). In Phase 3, behaviors #1a and #1b were combined, as were #2a and #2b. Expert participants developed behavior #4 in Phase 3. In Phase 3 Round 3, expert participants strongly or moderately endorsed all ideal behaviors.

In Phase 2 Round 3, all unacceptable behaviors received a strong or moderate endorsement of 70% or greater (Table H2). In Phase 3, five participants suggested adding the language and terminology verbiage to unacceptable behavior #1. One participant suggested moving the program expectations portion from behavior #3 in the Application Process subcomponent (Table H3) and combining it with unacceptable behavior #3 in Table 23. In Phase 3 Round 3, all unacceptable behaviors were strongly or moderately endorsed.

Table H3 contains the acceptable behavior developed in Phase 3 for the Communication subcomponent. The table includes the Round 1 brainstorming responses,

Round 2 revised behaviors, and the Round 3 percentage of strong or moderate endorsement. In Round 2, acceptable behaviors #1a and #1b were combined, and the unable/unwilling to communicate portion was removed per expert participant suggestion. Behaviors #3a and #3b were also combined. Expert participants developed behavior #4 in Round 2. In Round 3, all behaviors received a strong or moderate endorsement of 70% or greater.

***Application process***

The third IC map contains the behavioral variations for the application process subcomponent of the structured student internship/mentorship program key feature (Table 21).

**Table 21**

*Structured Student Internship/Mentorship Program: Application Porcess Subcomponent IC Map*

| 1. Structured Student Internship/Mentorship Program: Schools and business partners collaborate to provide students with authentic experiences and training in career fields. | | | |
|---|---|---|---|
| Subcomponent: Application process | | | |
| Overarching concepts | Ideal behaviors | Acceptable behaviors | Unacceptable behaviors |
| 1. Student identification | A well-organized application process that identifies students for mentorship/internship programs is developed. | An application process is in place but needs refinement. | The application process is disorganized and hard to follow. |
| 2. Self-advocacy | The application process requires students to self-advocate demonstrating their dedication, responsibility, and endurance to complete an internship/ mentorship assignment. | The application process is easily accessible to students who are able to self-advocate. The application expresses the expectation that students commit for a specified time frame to complete the internship/ mentorship assignment. | The application is not easily accessible to students. It does not communicate the expectation that students self-advocate or commit to completing the internship/mentorship assignment. |
| 3. Location | Students can apply to a specific mentorship/ internship location. | Students can state their preferences for specific mentorship/internship locations. | |
| 4. Questions about program | Schools and business partners work to proactively answer questions. Stakeholders are encouraged to ask questions and supply feedback about the program prior to application submission. | Stakeholders are allowed to ask questions about the proposed program prior to application submission. | Students and parents/guardians are discouraged from asking questions about the program and recieve little or no help from stakeholders. |

The evolution of each behavior for the subcomponent can be found in Tables I1, I2, and I3 in Appendix I. Expert participants developed four ideal and acceptable behaviors and three unacceptable behaviors that were aligned using the following overarching concepts; student identification, self-advocacy, location, and questions about program. Experts agreed that an unacceptable behavior was not required for the location request concept, resulting in three unacceptable behaviors (Table I2). Tables I1 (ideal) and I2 (unacceptable) include the Phase 2 Round 1 brainstorming responses, Phase 2 Round 3 strong or moderate endorsement percent, Phase 3 revisions, and the Phase 3 Round 3 strong or moderate endorsement percent.

In Phase 2 Round 2, one expert participant suggested adding organization to behavior #1 (Table I1). In Phase 2 Round 3, behaviors #1, #2, and #3 received a strong or moderate endorsement of 70% or greater. In Phase 3, an expert participant suggested revising behavior #2, and #3 was revised for clarity. Additionally, participants developed behavior #4. In Phase 3 Round 3, expert participants strongly or moderately endorsed all ideal behaviors.

No suggestions for revisions were submitted in Phase 2 Round 2 for the unacceptable behaviors. In Phase 2 Round 3, behaviors #3 and #5 did not reach the 70% strong or moderate endorsement threshold and were removed from the Delphi instrument for Phase 3 (Table I2). Experts disagreed that students should not get to choose the location of the internship. Experts also disagreed that students should be selected for placement based on familial connections and politicking. Expert participants developed behaviors #4 and #5 in Phase 3. In Phase 3 Round 3, the expert participants strongly or moderately endorsed unacceptable behaviors #1, #2, and #4.

Table I3 contains the acceptable behavior developed in Phase 3 for the Application Process subcomponent. The table includes the Round 1 brainstorming responses, Round 2 revised behaviors, and the Round 3 percentage of strong or moderate endorsement. In Round 2, an expert participant suggested revising behavior #2. The expectations portion of behavior #3 was moved to the communication subcomponent. In Round 3, all acceptable behaviors received a strong or moderate endorsement of 70% or greater.

***Student participation in program***

The fourth IC map contains the behavioral variations for the Student Participation in Program subcomponent of the Structured Student Internship/Mentorship Program key feature (Table 22).

**Table 22**

*Structured Student Internship/Mentorship Program: Student Participation in Program Subcomponent IC Map*

| 1. Structured Student Internship/Mentorship Program: Schools and business partners collaborate to provide students with authentic experiences and training in career fields. | | | |
|---|---|---|---|
| Subcomponent: Student participation in program | | | |
| Overarching concepts | Ideal behaviors | Acceptable behaviors | Unacceptable behaviors |
| 1. Internship/ mentorship tasks | Students participate in a variety of realistic tasks that reflect authentic participation in the occupation (including entry level/operational tasks) | Students participate in daily tasks appropriate for the internship experience, but may occasionally be placed in the role of an observer while their mentor tends to responsibilities. | Students do not participate in tasks that reflect authentic participation in the occupation. |
| 2. Student safety | Student safety is ensured by vetting potential mentors and internship locations. | Student safety is a priority for all stakeholders. | Students are asked to meet alone with unvetted adults. |
| 3. Placement benefits | Stakeholders collaborate to find placements that have long-term benefits for students. Program participation exceeds graduation requirements. | Stakeholders try to find placements that engage student interests, have short-term benefits for students, or will give students an edge in their post-secondary pursuits. | Placement in the program is granted to meet a school requirement neither reflecting student interests nor college/career goals. |
| 4. Program timeline | The program has a flexible timeline increasing potential student participation. | Some flexibility exists, but students are expected to arrange their schedule to meet the structured timeline of the program. | The program timeline is not compatible with student schedules. A lack of flexibility prevents most students from applying. |
| 5. Outcomes from program | The program encourages students to become lifelong learners, innovators, and develop a growth mindset. | The program encourages students to take ownership of their choices and develop career-ready skills. | Students are advised away from the internship/mentorship program. |

The evolution of each behavior for the subcomponent can be found in Tables J1, J2, and J3 in Appendix J. Expert participants developed five ideal, acceptable, and

unacceptable behaviors that were aligned using the following overarching concepts; internship/mentorship tasks, student safety, placement benefits, program timeline, and outcomes from program. Table J1 (ideal) and Table J2 (unacceptable) include the Phase 2 Round 1 brainstorming responses, Phase 2 Round 3 strong or moderate endorsement percent, Phase 3 revisions, and the Phase 3 Round 3 strong or moderate endorsement percent.

In Phase 2 Round 2, expert participants suggested revising ideal behaviors #4 and #5a for clarity (Table J1). In Phase 3, behaviors #5a and #5b were combined. In Phase 2 Round 3, behaviors #2, #3, #4, and #5 received a strong or moderate endorsement of 70% or greater. In Phase 3, ideal behavior #1 was developed, and behavior #3 was revised. In Phase 3 Round 3, all ideal behaviors were strongly or moderately endorsed.

Expert participants developed unacceptable behavior #2 in Phase 2 Round 2 (Table J2). In Phase 2 Round 3, behavior #6 did not reach the 70% strong or moderate endorsement threshold and was removed from the Delphi instrument for Phase 3 (Table J2). Experts disagreed that business partners refuse students for reasons other than behavior or safety concerns. In Phase 3 Round 3, all participants strongly or moderately endorsed unacceptable behaviors #1 through #5.

Table J3 contains the acceptable behavior developed in Phase 3 for the Student Participation in Program subcomponent. The table includes the Round 1 brainstorming responses, Round 2 revised behaviors, and the Round 3 percentage of strong or moderate endorsement. In Round 2, behaviors #1a and #1b were combined per participant suggestion. Expert participants developed behavior #5. In Round 3, all experts strongly

endorsed behaviors #2 and #3. Behaviors #1, #4, and #5 received a strong or moderate endorsement of 70% or greater.

***Mentors***

The fifth IC map contains the behavioral variations for the mentor subcomponent of the structured student internship/mentorship program key feature (Table 23).

**Table 23**

*Structured Student Internship/Mentorship Program: Mentors Subcomponent IC Map*

| 1. Structured Student Internship/Mentorship Program: Schools and business partners collaborate to provide students with authentic experiences and training in career fields. | | | |
|---|---|---|---|
| Subcomponent: Mentors | | | |
| Overarching concepts | Ideal behaviors | Acceptable behaviors | Unacceptable behaviors |
| 1. Mentor assignment | Students are assigned both school and business level mentors during their internship placement. The mentor program is structured and well organized. | The mentor program is structured and organized providing students with at least one mentor (business or school level). | The mentorship program is disorganized. Students do not receive support from a mentor (school or business level) during their internship. |
| 2. Roles and responsibilities | All mentors have clearly defined roles and responsibilities that are communicated to students. Students have opportunities to provide feedback on the mentoring experience. | All mentors are aware of each other's responsibilities. Mentor roles are communicated to students. | The roles and responsibilities of mentors are not defined. |
| 3. Meeting schedule | A scheduled timeline for triad meetings (student, business mentor, and school mentor) is established. | Meetings between students and their mentors occur (business and/or school level). Mentors reschedule meetings when necessary. | There is a lack of communication between students and their mentors (school and business level). |

| | Overarching concepts | Ideal behaviors | Acceptable behaviors | Unacceptable behaviors |
|---|---|---|---|---|
| 4. | Discussing improvements | Shortcomings of the school and business are regularly and openly discussed to improve the internship/mentorship program. | Mentors constructively discuss shortcomings of the school or business with mentees to provide a realistic view of the occupation or preparatory program. | Shortcomings of the school or business are discussed in front of student(s) in a derogatory manner. |
| 5. | Profess-ionalism and expectations | Mentors have meaningful discussions about professionalism and job expectations *with* students and model professionalism *to* students. | Mentors model professionalism to students and enforce job expectations. | Mentors do not model professional behaviors to students or enforce job expectations. |
| 6. | Mentor recruitment and motives | Mentors volunteer for their role. They are interviewed to verify their commitment to the program and ensure that their motives are student centered. | Mentors are selected based on recommendations. They commit to program expectations and remain student-focused. | Mentors do not follow through with commitments. Their participation in program is driven by self-interest. |

The evolution of each behavior for the subcomponent can be found in Tables K1, K2, and K3 in Appendix K. Expert participants developed six ideal, acceptable, and unacceptable behaviors that were aligned using the following overarching concepts; mentor assignment, roles and responsibilities, meeting schedule, discussing improvements, professionalism and expectations, and mentor recruitment and motives. Table K1 (ideal) and Table K2 (unacceptable) include the Phase 2 Round 1 brainstorming responses, Phase 2 Round 3 strong or moderate endorsement percent, Phase 3 revisions, and the Phase 3 Round 3 strong or moderate endorsement percent.

In Phase 2 Round 2, ideal behavior #1 was revised to increase clarity (Table K1). In Phase 2 Round 3, expert participants strongly endorsed ideal behaviors #2 and #5, and behaviors #1 and #3 were strongly or moderately endorsed. Expert participants developed behaviors #4 and #6 in Phase 3 Round 1. All behaviors were revised in Phase 3 Round 2

due to participant suggestions. In Phase 3 Round 3, all ideal behaviors were strongly or moderately endorsed.

The unacceptable behaviors (Table K2) received no suggestions for revisions in Phase 2 Round 2. In Phase 2 Round 3, behaviors #1, #3, and #4 received a strong or moderate endorsement of 70% or greater. However, these behaviors were revised in Phase 3. In Phase 3, expert participants also developed behaviors #2, #5, and #6. In Phase 3 Round 3, expert participants strongly or moderately endorsed all unacceptable behaviors.

Table K3 contains the acceptable behaviors developed in Phase 3 for the Mentor subcomponent. The table includes the Round 1 brainstorming responses, Round 2 revised behaviors, and the Round 3 percentage of strong or moderate endorsement. In Round 2, expert participants suggested revisions to behaviors #1 and #4 and developed behavior #6. In Round 3, expert participants strongly endorsed behaviors #3 and #5, and all other behaviors were strongly or moderately endorsed.

**Key Feature 2: Faculty Externships**

***During Externship***

The sixth IC map contains the behavioral variations for the during externship subcomponent of the faculty externships key feature (Table 24).

**Table 24**

*Faculty Externship: During Externship Subcomponent IC Map*

| 2. Faculty Externships: Business partners communicate current industry trends, demands, and expectations to schools through faculty externships with business partners. | | | |
|---|---|---|---|
| Subcomponent: During externship | | | |
| Overarching concepts | Ideal Behaviors | Acceptable Behaviors | Unacceptable Behaviors |
| 1. Externship experiences to classroom | Participants openly share and learn from each other to identify skills and knowledge students need to thrive in a specific industry. They look beyond obvious connections to bring a variety of opportunities to the classroom. | Participants share experiences and knowledge with the intent of bringing a better understanding of the industry to the classroom. | Stakeholders do not use the experience to build a mutually beneficial partnership. Educators are unwilling to bring new practices from externships to the classroom. |
| 2. Participant engagement | All stakeholders willing and open to trying new things, engaged, and participate with fidelity. | All stakeholders participate and are willing to try new things. | Stakeholders' participation lacks commitment and interest. |
| 3. Participant interactions | Interactions and language between all participants are courteous and complimentary. | Interactions between participants are civil and solutions-oriented. | Participants are arrogant, non-compliant, and use language that is directed toward discrediting each other. |
| 4. Mentor involvement | Internship program mentors are involved in externships. | | Internship program mentors are not involved in externships. |
| 5. Time with business partners | Time to plan and network with business partners is provided in the externship schedule. | Externship schedule is flexible and allows some time to work with business partners. | Time to work or network with business partners is not built into the program; expectation to meet falls after contractual hours. |

The evolution of each behavior for the subcomponent can be found in Tables L1, L2, and L3 in Appendix L. Expert participants developed five ideal, acceptable, and unacceptable behaviors that were aligned using the following overarching concepts; externship experiences to classroom, participant engagement, participant interactions, mentor involvement, and time with business partners. Table L1 (ideal) and Table L2 (unacceptable) include the Phase 2 Round 1 brainstorming responses, Phase 2 Round 3 strong or moderate endorsement percent, Phase 3 revisions, and the Phase 3 Round 3 strong or moderate endorsement percent.

No revisions were suggested in Phase 2 Round 2 for either the ideal or unacceptable behaviors. In Phase 2 Round 3, experts strongly endorsed behaviors #1a and #2a. All other behaviors received a strong or moderate endorsement of 70% or greater (Table L1). In Phase 3, behaviors #1a, #1b, and 1c, as well as behaviors #2a and #2b, were combined. Behaviors #4 and #5 underwent adjustments in wording due to participant suggestions. In Phase 3 Round 3, all participants strongly or moderately endorsed all ideal behaviors.

In Phase 2 Round 3, unacceptable behaviors #1 through #5 received a strong or moderate endorsement of 70% or greater (Table L2). In Phase 3, behavior #1a and #1b were combined, and behaviors #3a and #3b. Expert participants developed behavior #5 in Phase 3 Round 2 and revised behaviors #4 and #2. In Phase 3 Round 3, all unacceptable behaviors were strongly or moderately endorsed.

Table L3 contains the acceptable behaviors developed in Phase 3 for the During Externship subcomponent. The table includes the Round 1 brainstorming responses, Round 2 revised behaviors, and the Round 3 percentage of strong or moderate

endorsement. In Round 2, acceptable behaviors #1a and #1b were combined, and the unable/unwilling to communicate portion was removed per expert participant suggestion. Behaviors #1, #4, and #5 underwent minor revisions in Round 2. In Round 3, behavior #4 did not reach the 70% strong or moderate endorsement threshold and was removed from the Delphi instrument (Table L3). Experts disagreed that Internship program mentors have limited involvement in externships. Expert participants strongly or moderately endorsed all other acceptable behaviors.

***Planning and Preparation***

The seventh IC map contains the behavioral variations for the planning and preparation subcomponent of the faculty externships key feature (Table 25).

**Table 25**

*Faculty Externship: Planning and Preparation Subcomponent IC Map*

| 2. Faculty Externships: Business partners communicate current industry trends, demands, and expectations to schools through faculty externships with business partners. | | | |
|---|---|---|---|
| Subcomponent: Planning and preparation | | | |
| Overarching concepts | Ideal Behaviors | Acceptable Behaviors | Unacceptable Behaviors |
| 1. Externship outcomes | Co-created outcomes and expectations for externships are clearly communicated to, and agreed upon by, all stakeholders. | Intended outcomes are communicated to participants. | School leadership does not foster buy-in to the purpose of faculty externships. |
| 2. Stakeholder communication | Teacher needs and gaps are communicated to business partners and intermediaries. | There is consistent communication between stakeholders. | The externship is disorganized, lacking in transparency and communication. |
| 3. Debriefing externships | Adequate time to conduct and debrief externships is embedded in the school calendar. | Some time to conduct and debrief externships is embedded in the school calendar. | No time is allocated to running or debriefing externships. |
| 4. Organizing externship | Leaders from businesses and schools collaborate to organize and run externships. | Business leaders organize and run externships. | |
| 5. Career pathway alignment | Externships relate to multiple career pathways offered by the school and can shift in audience and priority. | Externships are aligned with career pathways offered by the school. | Externships are not connected to career pathways offered by the school. |

The evolution of each behavior for the subcomponent can be found in Tables M1, M2, and M3 in Appendix M. Expert participants developed five ideal and acceptable behaviors and four unacceptable behaviors that were aligned using the following overarching concepts; externship outcomes, stakeholder communication, debriefing

externships, organizing externship, and career pathway alignment. Experts did not endorse the organizing externships concept's unacceptable behavior, resulting in the development of four unacceptable behaviors (Table M2). Table M1 (ideal) and Table M2 (unacceptable) include the Phase 2 Round 1 brainstorming responses, Phase 2 Round 3 strong or moderate endorsement percent, Phase 3 revisions, and the Phase 3 Round 3 strong or moderate endorsement percent.

In Phase 2 Round 2, behavior #6 was removed from the Delphi instrument per expert participant feedback that timely response to student emails did not pertain to the faculty externship key feature. In Phase 2 Round 3, ideal behaviors #1 through #5 received a strong or moderate endorsement of 70% or greater (Table M1). In Phase 3 Round 2, participants revised ideal behavior #1, and behavior #4 was developed. In Phase 3 Round 3, all participants strongly or moderately endorsed all ideal behaviors.

No revisions were suggested for the unacceptable behaviors in Phase 2 Round 2. In Phase 2 Round 3, behavior #4 did not reach the 70% strong or moderate endorsement threshold (Table M2) and was removed from the Delphi instrument. Experts disagreed that there should be an expectation that business leaders organize and run externships, so In Phase 3, behavior #3 was developed. In Phase 3 Round 3, expert participants strongly or moderately endorsed all unacceptable behaviors.

Table M3 contains the acceptable behaviors developed in Phase 3 for the planning and preparation subcomponent. The table includes the Round 1 brainstorming responses, Round 2 revised behaviors, and the Round 3 percentage of strong or moderate endorsement. No revisions were suggested in Round 2. In Round 3, expert participants

strongly endorsed behaviors #1 and #2, and all other behaviors were strongly or moderately endorsed.

**Key Feature 3: Co-Created Curriculum**

***Planning and Collaboration***

The eight IC map contains the behavioral variations for the planning and collaboration subcomponent of the co-crated curriculum key feature (Table 26).

**Table 26**

*Co-Created Career Themed Curriculum: Planning and Collaboration Subcomponent IC Map*

| 3. Co-Created Career Themed Curriculum: Students engage with a cross-curricular career/industry themed curriculum co-created by schools and business partners. The curriculum is problem/project-based and aligned with current industry and community needs as well as academic standards. | | | |
|---|---|---|---|
| Subcomponent: Planning and Collaboration | | | |
| Overarching concepts | Ideal Behaviors | Acceptable Behaviors | Unacceptable Behaviors |
| 1. Time and resources | Time and resources are provided to collaborate with business partners and create the curriculum. | Some time and resources are provided to collaborate and align curriculum. | Minimal or no time and resources are provided to collaborate about curriculum |
| 2. Planning and collaboration meeting frequency | Planning and collaboration meetings are frequently and consistently scheduled (at least once per month). Stakeholders regularly attend meetings and actively contribute ideas. | Planning and collaboration meetings occur at least once per grading period/quarter. Stakeholders provide feedback but do not always attend meetings. | Planning and collaboration meetings are neither consistently scheduled nor attended by stakeholders. |

| | Overarching concepts | Ideal Behaviors | Acceptable Behaviors | Unacceptable Behaviors |
|---|---|---|---|---|
| 3. | Stakeholder communication | Stakeholders use a variety of tools (virtual, email, in-person) to consistently communicate. They are flexible, honest, open-minded, willing to learn, and have an innovative mindset. Interactions are positive, respectful, and focus on student success. | Stakeholders consistently communicate. Interactions are positive, respectful, and focus on student success. | There is a lack of communication, collaboration, and follow through. |
| 4. | Curriculum development leadership | Facilitators are identified to advance and motivate the curriculum development process. | A leadership structure is in place to facilitate the curriculum development process. | There is no leadership structure to facilitate curriculum development. |

The evolution of each behavior for the subcomponent can be found in Tables N1, N2, and N3 in Appendix N. Expert participants developed four ideal, acceptable, and unacceptable behaviors that were aligned using the following overarching concepts; time and resources, planning and collaboration meeting frequency, stakeholder communication, and curriculum development leadership. Table N1 (ideal) and Table N2 (unacceptable) include the Phase 2 Round 1 brainstorming responses, Phase 2 Round 3 strong or moderate endorsement percent, Phase 3 revisions, and the Phase 3 Round 3 strong or moderate endorsement percent.

No revisions were suggested for the ideal behaviors in Phase 2 Round 2. In Phase 2 Round 3, all behaviors received a strong or moderate endorsement of 70% or greater (Table N1). In Phase 3, expert participants suggested moving the phrase variety of

communions tools from the acceptable to the ideal description in behaviors #3. Additionally, behavior #4 was revised to add clarity and separation between the ideal and acceptable curriculum development behaviors. In Phase 3 Round 3, all participants strongly or moderately endorsed all ideal behaviors.

No revisions were suggested for the unacceptable behaviors in Phase 2 Round 2. In Phase 2 Round 3, behaviors #1 and #3 received a strong or moderate endorsement of 70% or greater. In Phase 3, an expert participant suggested replacing behavior #1 with a version that better aligned with the time and resources concept. Additionally, behavior #3 was rephrased to add clarity. Behaviors #2 and #4 were developed in Phase 3. In Phase 3 Round 3, all behaviors were strongly or moderately endorsed.

Table N3 contains the acceptable behaviors developed in Phase 3 for the planning and collaboration subcomponent. The table includes the Round 1 brainstorming responses, Round 2 revised behaviors, and the Round 3 percentage of strong or moderate endorsement. In Round 2, an expert participant suggested simplified behavior #1. Two expert participants suggested moving the variety of tools portion of behavior #3 from acceptable to ideal. Behavior #4 was revised to add clarity. In Round 3, expert participants strongly endorsed behavior #1, and all other behaviors received a strong or moderate endorsement of 70% or greater.

***Stakeholder Contributions***

The ninth IC map contains the behavioral variations for the stakeholder contributions subcomponent of the co-crated curriculum key feature (see Appendix W).

**Table 27**

*Co-Created Career Themed Curriculum: Stakeholder Contributions Subcomponent IC Map*

| 3. Co-Created Career Themed Curriculum: Students engage with a cross-curricular career/industry themed curriculum co-created by schools and business partners. The curriculum is problem/project-based and aligned with current industry and community needs as well as academic standards. | | | |
|---|---|---|---|
| Subcomponent: Stakeholder Contributions | | | |
| Overarching concepts | Ideal Behaviors | Acceptable Behaviors | Unacceptable Behaviors |
| 1. Curriculum contributions | All stakeholders are actively involved in and equally contribute to curriculum development. | The school leads curriculum development with input and contributions from stakeholders. | Stakeholders are siloed in responsibilities and convey one-sided needs or wants. |
| 2. Industry integration | Business partners share industry and community specific problems that form the foundation of student projects. Industry expectations, soft skills, and training materials are fully incorporated into the curriculum ensuring contextual teaching and learning scenarios. | Business partners support curriculum planning efforts by sharing industry-specific expectations and skills. They provide feedback on ways to increase industry connections and contexts. | The curriculum lacks industry integration. It is short-sighted, focusing on obvious connections, stereotypes, and quick wins. |
| 3. Adjusting curriculum | Business partners understand content standards and make recommendations to update curriculum based on ever-changing industry needs. | Educators and business partners agree upon adjustments and updates to curriculum. | Stakeholders are rigid and unwilling to compromise or adjust curriculum to meet each other's needs. |

The evolution of each behavior for the subcomponent can be found in Tables O1, O2, and O3 in Appendix O. Expert participants developed three ideal, acceptable, and

unacceptable behaviors that were aligned using the following overarching concepts; curriculum contributions, industry integration, and adjusting curriculum.

Table O1 (ideal) and Table O2 (unacceptable) include the Phase 2 Round 1 brainstorming responses, Phase 2 Round 3 strong or moderate endorsement percent, Phase 3 revisions, and the Phase 3 Round 3 strong or moderate endorsement percent. No revisions were suggested for the ideal behaviors in Phase 2 Round 2. In Phase 2 Round 3, all expert participants strongly or moderately endorsed behaviors #1 and #2. In Phase 3, behavior #3 was developed. The Ideal and acceptable descriptions for behavior #2 were switched in Phase 3 Round 2 per expert participant suggestions. In Phase 3 Round 3, all behaviors were strongly or moderately endorsed.

No revisions were suggested for the unacceptable behaviors in Phase 2 Round 2. In Phase 2 Round 3, all behaviors received a strong or moderate endorsement of 70% or greater (Table O2). In Phase 3, behaviors #2a, #2b, and #2c were combined, and behavior #3 was revised for clarification. In Phase 3 Round 3, expert participants strongly or moderately endorsed all behaviors.

Table O3 contains the acceptable behaviors developed in Phase 3 for the stakeholder contributions subcomponent. The table includes the Round 1 brainstorming responses, Round 2 revised behaviors, and the Round 3 percentage of strong or moderate endorsement. In Round 2, expert participants suggested switching the acceptable and ideal descriptions for behavior #2 and revising behavior #3. Expert participants also stated that behavior #4 was unnecessary as it was similar to behavior #3 in the planning and collaboration IC map. The behavior was removed after Round 2. In Round 3, behaviors #1, #2, and #3 received a strong or moderate endorsement of 70% or greater.

## Key Feature 4: Co-Develop Employabiltiy Skills

### *Collaboration and Communication*

The tenth IC map contains the behavioral variations for the collaboration and communication subcomponent of the co-developed employability skills key feature (Table 28).

**Table 28**

*Co-Develop Employability Skills: Collaboration and Communication Subcomponent IC Map*

| 4. Co-develop Employability Skills for Students: School and business partners co-develop employability skills applicable to the academy's industry and ways to evaluate student performance with these skills. | | | |
|---|---|---|---|
| Subcomponent: Collaboration and communication | | | |
| Overarching Concepts | Ideal behaviors | Acceptable behaviors | Unacceptable behaviors |
| 1. Time and resources | Time and resources are provided so teachers can co-develop employability skills with business partners and develop an authentic curriculum to teach students these skills. | Time and resources are provided to teachers for developing employability skills and an associated curriculum. | Stakeholders are unwilling to make time to meet and develop employability skills. |
| 2. Stakeholder input | A structured system to gather and discuss input from all stakeholders is developed. | Business partners review and provide feedback on the teacher developed employability skills. | Schools do not incorporate suggestions from business partners. |
| 3. Stakeholder Communication frequency | There is frequent communication and active collaboration between all groups. Stakeholders are flexible and open-minded. | Stakeholders communicate and collaborate on a regular basis. Stakeholders who cannot attend a meeting contribute virtually/via email or assign a representative to gather information. | Stakeholders do not communicate. |

The evolution of each behavior for the subcomponent can be found in Tables P1, P2, and P3 in Appendix P. Expert participants developed three ideal, acceptable, and unacceptable behaviors that were aligned using the following overarching concepts; time and resources, stakeholder input, and stakeholder communication frequency.

Table P1 (ideal) and Table P2 (unacceptable) include the Phase 2 Round 1 brainstorming responses, Phase 2 Round 3 strong or moderate endorsement percent, Phase 3 revisions, and the Phase 3 Round 3 strong or moderate endorsement percent. In Round 2, behaviors #2 and #3a were revised to increase clarity (Table P1). In Phase 2 Round 3, all ideal behaviors received a strong or moderate endorsement of 70% or greater. In Phase 3, behavior #1 was revised to incorporate an expert participant's suggestion, and behaviors #3a and 3b were combined. In Phase 3 Round 3, expert participants strongly or moderately endorsed all ideal behaviors.

No revisions were made to the unacceptable behaviors in Phase 2 Round 2. In Phase 2 Round 3, expert participants strongly or moderately endorsed all behaviors. In Phase 3, behaviors #1 and #3 were revised to increase clarity. Phase 3 Round 3, all unacceptable behaviors were strongly or moderately endorsed by expert participants.

Table P3 contains the acceptable behaviors developed in Round 3 for the collaboration and communication subcomponent. The table includes the Round 1 brainstorming responses, Round 2 revised behaviors, and the Round 3 percentage of strong or moderate endorsement. In Round 2, an expert participant suggested simplified behavior #1. Two expert participants suggested swapping portions of behavior #3 from acceptable to ideal, and behavior #4 was revised for clarity. In Round 3, behavior #1 was

strongly endorsed by expert participants, and all other behaviors received a strong or moderate endorsement of 70% or greater.

### *Development and Implementation*

The eleventh IC map contains the behavioral variations for the development and implementation subcomponent of the co-developed employability skills key feature (Table 29).

**Table 29**

*Co-Develop Employability Skills: Development and Implementation Subcomponent IC Map*

| 4. Co-develop Employability Skills for Students: School and business partners co-develop employability skills applicable to the academy's industry and ways to evaluate student performance with these skills. | | | |
|---|---|---|---|
| Subcomponent: Development and implementation | | | |
| Overarching Concepts | Ideal behaviors | Acceptable behaviors | Unacceptable behaviors |
| 1. Skills alignment | Stakeholders collaborate to develop employability skills that reflect current industry demands. They align with content standards and General Learner Outcomes (GLOs) | Employability skills are updated to match industry changes and align with either content standards or GLOs. | Skills are selected that do not align with industry demands. |
| 2. Shared understanding and implementation | Stakeholders share an understanding of, and expectations for, implementing employability skills school wide. | Stakeholders align understanding of employability skills and plan to implement them school wide. | Stakeholder groups do not align expectations and understandings of employability skills. |
| 3. Skill level expectations | Employability skill expectations meet industry appropriate levels to prepare students for post-secondary demands. | Employability skill expectations and lessons are developed at high school appropriate levels. | Employability skills are not implemented or reinforced in schools. |

| | Overarching Concepts | Ideal behaviors | Acceptable behaviors | Unacceptable behaviors |
|---|---|---|---|---|
| 4. | Skill application opportunities | Students are provided frequent opportunities to apply and demonstrate proficiency with employability skills. | Students have opportunities to practice employability skills. | Students are provided little to no opportunities to practice employability skills. |
| 5. | Measuring skills | A rubric is developed with realistic and measurable student result indicators. It is used to provide feedback to students on employability skill performance. | Realistic and measurable student result indicators are developed. | Students do not receive feedback on ways to improve skills. |
| 6. | Modeling skills | All stakeholders model professionalism to students by following employability expectations. | | Stakeholders do not follow employability skills expectations. |

The evolution of each behavior for the subcomponent can be found in Tables Q1, Q2, and Q3 in Appendix Q. Expert participants developed six ideal and unacceptable behaviors and five acceptable behaviors. The behaviors were aligned using the following overarching concepts; skills alignment, shared understanding and implementation, skill level expectations, skill application opportunities, measuring skills, and modeling skills.

An acceptable behavior was not developed for the modeling skills concept. The behaviors are numbered in the tables below to correspond with the overarching concept used for their alignment. Table Q1 (ideal) and Table Q2 (unacceptable) include the Phase 2 Round 1 brainstorming responses, Phase 2 Round 3 strong or moderate endorsement percent, Phase 3 revisions, and the Phase 3 Round 3 strong or moderate endorsement percent.

In Phase 2 Round 2, ideal behavior #6 was revised to the following behavior; employability skills are used to show mentors the right and acceptable way to be a

professional. In Phase 2 Round 3, all behaviors received a strong or moderate endorsement of 70% or greater (Table Q1). In Phase 3, behavior #4 was developed, and expert participants suggested revisions to behaviors #1, #2, #4, #5, and #6. Behavior #3 was revised to increase clarity. In Phase 3 Round 2, the behavior #5 ideal and acceptable descriptions were switched per expert participant suggestions. In Phase 3 Round 3, all behaviors were strongly or moderately endorsed.

No revisions were suggested for the unacceptable behaviors in Phase 2 Round 2. In Phase 2 Round 3, behaviors #1, #2, #3, #5, and #6 received a strong or moderate endorsement of 70% or greater. In Phase 3, behavior #4 was developed, and behaviors #1 and #3 were revised per stakeholder suggestions. Behaviors #5 and #6 were also revised to increase clarity and alignment. In Phase 3 Round 3, expert participants strongly or moderately endorsed all behaviors.

Table Q3 contains the acceptable behaviors developed in Round 3 for the development and implementation subcomponent. The table includes the Round 1 brainstorming responses, Round 2 revised behaviors, and the Round 3 percentage of strong or moderate endorsement. In Round 2, behavior #2 was modified to include suggestions from two expert participants, plus behavior #5 acceptable and ideal descriptions were switched per expert participant suggestions. In Round 3, all behaviors were strongly or moderately endorsed.

**Key Feature 5: Work-Based Learning Opportunities**

***Opportunity Development***

The twelfth IC map contains the behavioral variations for the opportunity development subcomponent of the work-based learning opportunities key feature (Table 30).

**Table 30**

*Work-Based Learning Opportunities: Opportunity Development Subcomponent IC Map*

| 5. Work-Based Learning Opportunities (WBL): Schools and business partners collaborate to provide work-based experiences (guest speaking, capstone courses, mock interviews, etc.) that help students plan and execute their post-high school goals. | | | |
|---|---|---|---|
| Subcomponent: Opportunity development | | | |
| Overarching Concepts | Ideal behaviors | Acceptable behaviors | Unacceptable behaviors |
| 1. Real-world connection | WBL opportunities are clearly rooted in real-world scenarios, communicate ideas that contain social currency, are progressive, and easily implemented and executed. | WBL opportunities have real-world implications that consider the school, student and community. | The goals/requirements of the opportunity are set to a level that excludes or overwhelms students. |
| 2. Career pathway alignment | WBL event is aligned to a career pathway and provides students with opportunities to practice employability skills with industry partners. | The WBL event is aligned to a career pathway. | WBL event is not aligned to a career pathway. |
| 3. Organization and flexibility | WBL opportunities are well organized with clear expectations for participants and a flexible timeline allowing increased student participation. | WBL opportunities are organized with clear expectations for participants. Flexibility is constrained by student, school, and community factors. | WBL opportunities are disorganized and there is poor communication between facilitators. |
| 4. Follow up | Planned follow-up after the WBL opportunity occurs**.** | Limited follow up after the WBL opportunity | There is no follow-up after a WBL opportunity is established/created. |

The evolution of each behavior for the subcomponent can be found in Tables R1, R2, and R3 in Appendix R. Expert participants developed four ideal, acceptable, and unacceptable behaviors that were aligned using the following overarching concepts; real-world connection, career pathway alignment, organization and flexibility, and follow-up. Table R1 (ideal) and Table R2 (unacceptable) include the Phase 2 Round 1 brainstorming responses, Phase 2 Round 3 strong or moderate endorsement percent, Phase 3 revisions, and the Phase 3 Round 3 strong or moderate endorsement percent.

Ideal behavior #4 was developed in Phase 2 Round 2. In Phase 2 Round 3, behaviors #1, #3a, #3b, and #4 received a strong or moderate endorsement of 70% or greater (Table R1). In Phase 3 Round 1, behaviors #3a and #3b were combined, and behavior #2 was developed. Behaviors #1 and #4 were revised to clarify and align the behavioral variations. In Phase 3 Round 3, all behaviors were strongly or moderately endorsed.

In Phase 2 Round 2, ideal behavior #3 was revised, combining the following brainstorming round contributions; lack of organization and poor communication. In Phase 3, behavior #2 was developed, and behaviors #1 and #4 were revised to increase clarity and alignment between the behavioral variations. In Phase 3 Round 3, all behaviors were strongly or moderately endorsed.

Table R3 contains the acceptable behaviors developed in Round 3 for the development and implementation subcomponent. The table includes the Round 1 brainstorming responses, Round 2 revised behaviors, and the Round 3 percentage of strong or moderate endorsement. No revisions were suggested in Round 2. In Round 3, all behaviors received a strong or moderate endorsement of 70% or greater.

### *Stakeholder Involvement*

The thirteenth IC map contains the behavioral variations for the stakeholder involvement subcomponent of the work-based learning opportunities key feature (Table 31).

**Table 31**

*Work-Based Learning Opportunities: Stakeholder Involvement Subcomponent IC Map*

| 5. Work-Based Learning Opportunities (WBL): Schools and business partners collaborate to provide work-based experiences (guest speaking, capstone courses, mock interviews, etc.) that help students plan and execute their post-high school goals. | | | |
|---|---|---|---|
| Subcomponent: Stakeholder involvement | | | |
| Overarching Concepts | Ideal behaviors | Acceptable behaviors | Unacceptable behaviors |
| 1. Stakeholder investment | The WBL opportunity is a collaborative effort where all stakeholders have a clear return on investment. | Collaborators are committed to and invested in the partnership. | Stakeholders do not build on the business relationship to create a mutually beneficial partnership. |
| 2. Stakeholder communication | Stakeholders have strong communication, commitment, and consistently schedule meeting times. | There is strong communication between stakeholders. Businesses communicate with schools when they cannot attend a scheduled WBL event. | Stakeholder groups do not support each other or communicate. |
| 3. Partnership support | Schools and business partners select strong intermediaries to support the partnership structure. | | Stakeholders do not use the WBL experience to create a partnership that will benefit students. |
| 4. Safety training | All stakeholders receive DOE regulation training on WBL site safety. | A plan for safety trainings are established. | DOE safety regulations and protocols are not considered nor followed. |

The evolution of each behavior for the subcomponent can be found in Tables S1, S2, and S3 in Appendix S. Expert participants developed four ideal, acceptable, and unacceptable behaviors that were aligned using the following overarching concepts; stakeholder investment, stakeholder communication, partnership support, and safety training. Table S1 (ideal) and Table S2 (unacceptable) include the Phase 2 Round 1 brainstorming responses, Phase 2 Round 3 strong or moderate endorsement percent, Phase 3 revisions, and the Phase 3 Round 3 strong or moderate endorsement percent.

One participant in phase 3 Round 2 stated that the ideal, acceptable, and unacceptable descriptions of behavior #5 needed clarification. Three other participants suggested removing behavior #5 from the IC map entirely. Due to these comments and similarity to behavior #4 in the Key Feature 6: Stakeholder roles IC map (Tables U1; U2; U3), behavior #5 was removed from the Delphi instrument.

No revisions were suggested for the ideal behaviors (Table S1) in Round 2. In Phase 2 Round 3, all behaviors received a strong or moderate endorsement of 70% or greater. In Round 3, behaviors #2a and #2b were consolidated to reduce redundancy. Additionally, behaviors #1 and #4 were revised to increase clarity and alignment between the behavioral variations. Expert participants strongly or moderately endorsed all remaining behaviors in Phase 3 Round 3.

No revisions were suggested for the unacceptable behaviors (Table S2) in Phase 2 Round 2. Phase 2 Round 3, behaviors #1, #2, #3, and #5 received a strong or moderate endorsement of 70% or greater. In Phase 3 Round 2, an expert participant suggested adding communication to the behavior #2 description, and behavior #4 was developed.

Expert participants strongly or moderately endorsed behaviors #1 through #4 in Phase 3 Round 3.

Table S3 contains the acceptable behaviors developed in Round 3 for the stakeholder involvement subcomponent. The table includes the Round 1 brainstorming responses, Round 2 revised behaviors, and the Round 3 percentage of strong or moderate endorsement. In Round 2, one expert submitted a description for behavior #3 similar to the ideal behavior #3 description. Due to the lack of variation between the ideal and acceptable descriptors, no acceptable behavior #3 was developed. In Round 3, expert participants strongly or moderately endorsed behaviors #1, #2, and #4.

***Student Interactions***

The fourteenth IC map contains the behavioral variations for the student interactions subcomponent of the work-based learning opportunities key feature (Table 32).

**Table 32**

*Work-Based Learning Opportunities: Student Interactions Subcomponent IC Map*

| 5. Work-Based Learning Opportunities (WBL): Schools and business partners collaborate to provide work-based experiences (guest speaking, capstone courses, mock interviews, etc.) that help students plan and execute their post-high school goals. | | | |
|---|---|---|---|
| Subcomponent: Student interactions | | | |
| Overarching Concepts | Ideal behaviors | Acceptable behaviors | Unacceptable behaviors |
| 1. Attitude toward students | Stakeholders show enthusiasm in working with students. | Stakeholders have positive attitudes and interactions with students. | Facilitators lack passion, are uninspiring, or have a negative attitude about their career. |
| 2. Preparing students | Stakeholders collaborate to ensure students are prepared for participation in the WBL opportunities. | Stakeholders understand the benefits of collaborating to prepare students for WBL opportunities. | No time is allocated to prepare or support students for success with WBL opportunities. |
| 3. Communicating event to students | Educators and business partners share in their understanding for the WBL event and how participation will benefit students. These understandings are communicated to students. | Educators discuss WBL events with students to provide deeper understanding of the experience. | Stakeholders promote a trivial attitude in students by understating the importance of WBL experiences. |

The evolution of each behavior for the subcomponent can be found in Tables T1, T2, and T3 in Appendix T. Expert participants developed three ideal, acceptable, and unacceptable behaviors that were aligned using the following overarching concepts; attitude toward students, preparing students, and communicating event to students. Table T1 (ideal) and Table T2 (unacceptable) include the Phase 2 Round 1 brainstorming responses, Phase 2 Round 3 strong or moderate endorsement percent, Phase 3 revisions, and the Phase 3 Round 3 strong or moderate endorsement percent.

No revisions were suggested for the ideal behaviors (Table T1) in Round 2. In Phase 2 Round 3, behaviors #1 and #2 received a strong or moderate endorsement of 70% or greater. In Round 3, behavior #3 was developed. Additionally, behaviors #1 and #2 were revised to increase clarity and alignment between the behavioral variations. Expert participants strongly or moderately endorsed all behaviors in Phase 3 Round 3.

In Phase 2 Round 2, an expert participant commented that behavior #1 was not clear due to the subjective nature of the word boring. Phase 2 Round 3, all unacceptable behaviors received a strong or moderate endorsement of 70% or greater. In Phase 3 Round 2, behaviors #3a and 3b were combined. In Phase 3 Round 3, expert participants strongly or moderately endorsed all behaviors.

Table T3 contains the acceptable behaviors developed in Round 3 for the development and implementation subcomponent. The table includes the Round 1 brainstorming responses, Round 2 revised behaviors, and the Round 3 percentage of strong or moderate endorsement. In Round 2, two expert participants suggested revising behavior #3 by clarifying that educators discuss WBL events with students. In Round 3, all behaviors were strongly or moderately endorsed.

**Key Feature 6: Students Participate in Business Partner Events**

***Stakeholder Roles***

The fifteenth IC map contains the behavioral variations for the stakeholder roles subcomponent of the students participate in business partner events key feature (Table 33).

**Table 33**

*Students Participate in Business Partner Events: Stakeholder Roles Subcomponent IC Map*

| 6. Students participate in business partner events: Students are offered service or volunteer opportunities at business partner events (job fairs, beach clean-ups, family fairs, etc.). | | | |
|---|---|---|---|
| Subcomponent: Stakeholder roles | | | |
| Overarching Concepts | Ideal behaviors | Acceptable behaviors | Unacceptable behaviors |
| 1. Volunteer experiences | Stakeholders collaborate to provide multiple, diverse volunteer experiences for students at business partner events. | Stakeholders plan some volunteer experiences for students at business partner events. | Stakeholders do not attempt to plan and organize volunteer experiences for students at business partner events. |
| 2. Follow-up with students | Business partners connect and follow up with students to include them in official business events or internship opportunities. | Business partners offer a sign-in sheet for student participants and attempt to follow up with students. | There is a lack of follow-up with students after the event. |
| 3. Business partner engagement | Business partners actively recruit student volunteers and adults welcome students at events. | Business partners are open to including minors in events. | |
| 4. Stakeholder and mentor behaviors | Stakeholders lead by example through sincere participation in events and show enthusiasm when working with students. Student internship mentors get involved in events and invite/include mentees. | Stakeholders, including student mentors, led by example at events and encourage students to become involved with events. | Stakeholders and student mentors do not exhibit the behaviors expected of students. Business partner event opportunities are not communicated to students. |

The evolution of each behavior for the subcomponent can be found in Tables U1, U2, and U3 in Appendix U. Expert participants developed four ideal, acceptable, and unacceptable behaviors that were aligned using the following overarching concepts; volunteer experiences, follow-up with students, business partner engagement, and

stakeholder and mentor behaviors. Table U1 (ideal) and Table U2 (unacceptable) include the Phase 2 Round 1 brainstorming responses, Phase 2 Round 3 strong or moderate endorsement percent, Phase 3 revisions, and the Phase 3 Round 3 strong or moderate endorsement percent.

In Phase 2 Round 2, ideal behaviors #1a and 1b were combined, becoming following; stakeholders collaborate to provide multiple, diverse volunteer experiences with businesses. In Phase 3 Round 2, expert participants suggested switching the ideal descriptors for behaviors #2 and #3 with the acceptable descriptors. Additionally, behaviors #4a, 4b, and 4c were combined. Expert participants strongly or moderately endorsed behaviors #1 through #4 in Phase 3 Round 3.

In Phase 2 Round 2, unacceptable behavior #2 was revised for clarity (Table U2). Phase 2 Round 3, all behaviors received a strong or moderate endorsement of 70% or greater. In Phase 3 Round 2, three participants suggested editing behavior #4, and one suggested combining behavior #3 with behavior #4. This combination better aligned the behavior #4 variations. No further recommendations were submitted for behavior #3, leaving the indicator vacant in the final IC map. All participants strongly or moderately endorsed behaviors #1, #2, and #4 in Phase 3 Round 3.

Table U3 contains the acceptable behaviors developed in Round 3 for the stakeholder involvement subcomponent. The table includes the Round 1 brainstorming responses, Round 2 revised behaviors, and the Round 3 percentage of strong or moderate endorsement. As discussed previously, the ideal and acceptable descriptors for behaviors #2 and #3 were switched in Round 2. Behavior #4 was also revised in Round 2 due to an

expert participant's suggestion. In Round 3, all acceptable behaviors received a strong or moderate endorsement of 70% or greater.

### *Preparing Students*

The sixteenth IC map contains the behavioral variations for the preparing students subcomponent of the students participate in business partner events key feature (Table 34).

**Table 34**

*Students Participate in Business Partner Events: Preparing Students Subcomponent IC Map*

| 6. Students participate in business partner events: Students are offered service or volunteer opportunities at business partner events (job fairs, beach clean-ups, family fairs, etc.). | | | |
|---|---|---|---|
| Subcomponent: Preparing students | | | |
| Overarching Concepts | Ideal behaviors | Acceptable behaviors | Unacceptable behaviors |
| 1. Workforce connections | Students are able to express the connection between the business partner event and their future workforce goals. | Stakeholders communicate the connections between the event and workforce needs to students. | Students are unaware of the connection between the event and workforce needs. |
| 2. Student performance expectations | Employability skills are used to create clear adult interaction guidelines, objectives, and expectations for students. | Students are expected to demonstrate proficiency with employability skills while volunteering at business partner events. | Value is placed on perfection over progress regarding student performance. |
| 3. Student preparation | Prior to event, all students are prepared with strategies that will help them rise above their comfort zone and connect with individuals at events. | Prior to an event, shy/reluctant students are prepared to interact with adults and encouraged to venture outside of their comfort zone. | No assistance or planning is provided to help students prepare for an event. |
| 4. Planning interactions | Before an event, teachers share guest lists with students and help them decide who to seek out at the event. | Teachers are available and accessible for students during events. | |

The evolution of each behavior for the subcomponent can be found in Tables V1, V2, and V3 in Appendix V. Expert participants developed four ideal, acceptable, and unacceptable behaviors that were aligned using the following overarching concepts; workforce connections, student performance expectations, student preparation, and planning interactions

Phase 3 Round 2, behavior #5 was removed from the IC map draft. Three participants suggested removing the variations for behavior #5. Another participant commented that behavior #5 reiterated behavior #3 in the Key Feature 6: Stakeholder roles IC map (Tables U1; U2; U3).

Table V1 (ideal) and Table V2 (unacceptable) include the Phase 2 Round 1 brainstorming responses, Phase 2 Round 3 strong or moderate endorsement percent, Phase 3 revisions, and the Phase 3 Round 3 strong or moderate endorsement percent. In Phase 2 Round 2, one expert participant suggested expanding ideal behavior #3 (Table V1). In Phase 2 Round 3, all ideal behaviors received a strong or moderate endorsement of 70% or greater. In Phase 3 Round 2, the ideal and acceptable descriptions for behavior #1 were switched to increase alignment between the behavioral variations. In Phase 3 Round 2, behavior #2 was revised due to stakeholder contributions. Expert participants strongly or moderately endorsed behaviors #1 through #4 in Phase 3 Round 3.

No revisions were suggested for the unacceptable behaviors (Table V2) in Round 2. In Phase 2 Round 3, all behaviors received a strong or moderate endorsement of 70% or greater. In Round 3, all three unacceptable behaviors were revised to increase clarity and alignment between the behavioral variations. In Phase 3, expert participants agreed that the description for unacceptable behavior #3 also aligned with the ideal and

acceptable descriptions for behavior #4. Phase 3 Round 3, all unacceptable behaviors were strongly or moderately endorsed by expert participants.

Table V3 contains the acceptable behaviors developed in Round 3 for the preparing students subcomponent. The table includes the Round 1 brainstorming responses, Round 2 revised behaviors, and the Round 3 percentage of strong or moderate endorsement. In Phase 3 Round 2, the ideal and acceptable descriptions for behavior #1 were switched to increase alignment between the behavioral variations. Behavior #1 was revised to increase clarity in Round 2. In Round 3, all behaviors were strongly or moderately endorsed by expert participants.

**Key Feature 7: Shared Vision for Partnership**

***Establishing Vision***

The seventeenth IC map contains the behavioral variations for the establishing vision subcomponent of the shared vision for partnership key feature (Table 35).

**Table 35**

*Shared Vision for Partnership: Establishing Vision Subcomponent IC Map*

| 7. Shared Vision for Partnership: Schools and business partners define outcomes, parameters, and purposes for the partnership. | | | |
|---|---|---|---|
| Subcomponent: Establishing vision | | | |
| Overarching Concepts | Ideal behaviors | Acceptable behaviors | Unacceptable behaviors |
| 1. Time to establish vision | All stakeholders are provided with time and resources to collaborate and establish a shared vision for the partnership. | Teachers and industry partners have opportunities to develop a vision to communicate the focus of the partnership. | There is little to no effort given to establishing a shared vision for the partnership. |
| 2. Meeting schedule and structure | A regular meeting schedule with structured agendas is established. If a stakeholder cannot attend a meeting, they will select a temporary representative. | Set meeting times, plus an agenda and outcomes, are communicated to stakeholders. | Meetings are ad hoc poorly attended, and lack a set agenda. |
| 3. Communication and compromise | There is open and consistent communication between all groups, allowing for constructive criticism. Stakeholders are flexible and willing to compromise. | Communication occurs regularly and is mostly positive. Stakeholders are willing to adjust their perspective and commit to the vision for the benefit of students. | There is a lack of communication and collaboration. Stakeholders are not willing to compromise, explore new options, and are narrow-minded in scope. |
| 4. Vision alignment | The shared vision for the partnership aligns with both the career academy’s vision and business partners’ vision. | The shared vision for the partnership aligns with the career academy's vision. | The shared vision is not clearly aligned to the academy or business's visions. |

The evolution of each behavior for the subcomponent can be found in Tables W1, W2, and W3 in Appendix W. Expert participants developed four ideal, acceptable, and unacceptable behaviors that were aligned using the following overarching concepts; time

to establish vision, meeting schedule and structure, communication and compromise, and vision alignment. A fifth overarching concept, community knowledge, was removed in Phase 3 Round 2 due to expert participant suggestions. Experts commented that the variations of behavior #5 were unnecessary and confusing, so it was removed from the IC map drafts (Tables W1; W2; W3).

Table W1 (ideal) and Table W2 (unacceptable) include the Phase 2 Round 1 brainstorming responses, Phase 2 Round 3 strong or moderate endorsement percent, Phase 3 revisions, and the Phase 3 Round 3 strong or moderate endorsement percent. No revisions were suggested for the ideal behaviors in Phase 2 Round 2. In Phase 2 Round 3, behavior #6 did not reach the 70% strong or moderate endorsement threshold (Table W1). Expert participants disagreed that ambition should be a behavior for establishing the shared vision of the partnership. Behavior #6 was removed from the Delphi instrument for Phase 3 Round 1. In Phase 3, expert participants suggested revisions to behaviors #1, #3, and #4. Additionally, behaviors #2a, 2b, and 2c were combined to clarify ideal behavior #2 and solidify the communication concept. In Phase 3 Round 3, behaviors #1 through #4 were strongly or moderately endorsed by all participants.

In Phase 2 Round 3, all unacceptable behaviors received a strong or moderate endorsement of 70% or greater (Table W2). In Phase 3 Round 1, unacceptable behaviors #2a, #2b, and #2c were combined to clarify unacceptable behavior #2 and solidify the communication concept. In Phase 3 Round 2, Behaviors #3 and #4 were developed, and behavior #1 was revised. All expert participants strongly or moderately endorsed behaviors #1 through #4 in Phase 3 Round 3.

Table W3 contains the acceptable behaviors developed in Phase 3 for the establishing vision subcomponent. The table includes the Round 1 brainstorming responses, Round 2 revised behaviors, and the Round 3 percentage of strong or moderate endorsement. In Round 2, behaviors #2a and #2b were combined, and behavior #5 was removed, as discussed previously. Additionally, behavior #4 was revised by moving the student awareness of the vision portion of the description to behavior #1 in the vision application IC map (see Table X3 in Appendix X). In Round 3, behavior #2 was strongly endorsed by expert participants, and all remaining behaviors were strongly or moderately endorsed.

***Vision Application***

The eighteenth IC map contains the behavioral variations for the vision application subcomponent of the shared vision for partnership key feature (Table 36).

**Table 36**

*Shared Vision for Partnership: Vision Application Subcomponent IC Map*

| 7. Shared Vision for Partnership: Schools and business partners define outcomes, parameters, and purposes for the partnership | | | |
|---|---|---|---|
| Subcomponent: Vision application | | | |
| Overarching Concepts | Ideal behaviors | Acceptable behaviors | Unacceptable behaviors |
| 1. Student reflection | Students reflect on how shared vision plays a role in their development. | Students are aware of the vision for the partnership. | Stakeholders, including students, do not know the vision. |
| 2. Commitment to vision | There is commitment to the common vision. | There is commitment to an established vision. | |
| 3. Using vision in partnership | All stakeholders are very familiar with the vision and use it as a lens to focus important partnership issues. | Relationships built between stakeholders are focused on the internship program and may be limited in scope. | Stakeholders do not build on partnerships to create a mutually beneficial plan for students. |
| 4. Incorporating vision into curricula | Stakeholders seamlessly incorporate the vision into projects. Students know and use the vision to develop goals. | Teachers and business partners can access the vision and use it as a lens to guide projects and develop goals for students. | Educators conduct teaching methods that ignore or disregard the shared vision. |

The evolution of each behavior for the subcomponent can be found in Tables X1, X2, and X3 in Appendix X. Expert participants developed four ideal, acceptable, and unacceptable behaviors that were aligned using the following overarching concepts; student reflection, commitment to vision, using vision in partnership, and incorporating vision into curricula.

Table X1 (ideal) and Table X2 (unacceptable) include the Phase 2 Round 1 brainstorming responses, Phase 2 Round 3 strong or moderate endorsement percent,

Phase 3 revisions, and the Phase 3 Round 3 strong or moderate endorsement percent. No revisions were suggested for the ideal behaviors in Phase 2 Round 2. In Phase 2 Round 3, behaviors #2 and #3 received a strong or moderate endorsement of 70% or greater but were revised based on expert participant contributions in Phase 3. Behaviors #1 and #4 were also developed in Phase 3. In Phase 3 Round 3, expert participants strongly or moderately endorsed all behaviors.

No revisions were suggested for the unacceptable behaviors (Table X2) in Round 2. In Phase 2 Round 3, all behaviors received a strong or moderate endorsement of 70% or greater. In Round 3, expert participants agreed that the description for unacceptable behavior #1 also aligned with the ideal and acceptable descriptions for behavior #2. Additionally, behaviors #3a and #3b were combined to reduce redundancy. Phase 3 Round 3, all unacceptable behaviors were strongly or moderately endorsed by expert participants.

Table X3 contains the acceptable behaviors developed in Phase 3 for the vision application subcomponent. The table includes the Round 1 brainstorming responses, Round 2 revised behaviors, and the Round 3 percentage of strong or moderate endorsement. In Round 2, expert participants suggested revisions to behaviors #1 and #2. In Round 3, expert participants strongly or moderately endorsed all behaviors.

**Key Feature 8: Academy Advisory Boards**

***Member Roles***

The nineteenth IC map contains the behavioral variations for the member roles subcomponent of the academy advisory boards key feature (Table 37).

**Table 37**

*Academy Advisory Boards: Member Roles Subcomponent IC Map*

| 8. Academy Advisory Boards: Stakeholders form advisory boards to develop or evolve career academies and pathways that reflect current industry trends and school needs. | | | |
|---|---|---|---|
| Subcomponent: Member roles | | | |
| Overarching Concepts | Ideal behaviors | Acceptable behaviors | Unacceptable behaviors |
| 1. Stakeholder representatives | The advisory board has more than one established representative from each of the following: teachers, school leaders, business partners, students, parents, and community members. New voices are welcomed at the table. | Stakeholders are willing to be board members OR an active participant if they cannot serve on the board. | Stakeholders do not make time to be involved with the advisory board. |
| 2. Career integration | Board members and participants share current industry trends and propose career pathway evolutions to meet these trends. | Advisory board members and participants suggest the best pathways to start and or take to enter a career. | There is no buy-in from the industry. Participants want to adhere to the status quo regarding educational practices. |
| 3. Meeting participation | Board members and participants are committed and participate at meetings. They are flexible and willing to meet later in the day to ensure regular attendance. | Most board members and participants regularly attend and participate in meetings though there are no expectations to meet beyond the scope of the work day. | There is a lack of attendance and participation from stakeholders at planned meetings. |
| 4. Follow-though | Stakeholders follow-through with commitments and assigned tasks. | Stakeholders communicate and request support to ensure follow-through with commitments and assigned tasks. | There is no follow-through by stakeholders. |

The evolution of each behavior for the subcomponent can be found in Tables Y1, Y2, and Y3 in Appendix Y. Expert participants developed four ideal, acceptable, and unacceptable behaviors that were aligned using the following overarching concepts; stakeholder representatives, career integration, meeting participation, and follow-through.

Table Y1 (ideal) and Table Y2 (unacceptable) include the Phase 2 Round 1 brainstorming responses, Phase 2 Round 3 strong or moderate endorsement percent, Phase 3 revisions, and the Phase 3 Round 3 strong or moderate endorsement percent. No revisions were suggested for the ideal behaviors in Phase 2 Round 2. In Phase 2 Round 3, all behaviors received a strong or moderate endorsement of 70% or greater. For Phase 3 Round 1, behaviors #1a and #1b, plus #3a, 3b, and #3c were combined but further revised in Phase 3 per expert participant suggestions. For behavior #1, three expert participants stated that they did not like the idea of term limits. Two of these participants suggested rephrasing the statement to incorporate new voices. For behavior #3, three expert participants suggested adding attendance to the description to align the behavioral variations. One of these participants also suggested rephrasing the description to increase clarity. Behaviors #2 and #4 were rephrased to increase clarity. In Phase 3 Round 3, expert participants strongly or moderately endorsed all behaviors.

No revisions were suggested for the unacceptable behaviors (Table Y2) in Round 2. In Phase 2 Round 3, all behaviors received a strong or moderate endorsement of 70% or greater. In Phase 3, behaviors #1a and #1b were combined, as were #2a and #2b. Behavior #4 was revised for clarity. In Phase 3 Round 3, expert participants strongly or moderately endorsed all behaviors.

Table Y3 contains the acceptable behaviors developed in Phase 3 for the member roles subcomponent. The table includes the Round 1 brainstorming responses, Round 2 revised behaviors, and the Round 3 percentage of strong or moderate endorsement. In Round 2, behavior #4 was developed, and no revisions were submitted for behaviors #1 through #3. In Round 3, all behaviors received a strong or moderate endorsement of 70% or greater.

***Communication and Relationships***

The twentieth IC map contains the behavioral variations for the communication and relationships subcomponent of the academy advisory boards key feature (Table 38).

**Table 38**

*Academy Advisory Boards: Communication and Relationships Subcomponent IC Map*

| 8. Academy Advisory Boards: Stakeholders form advisory boards to develop or evolve career academies and pathways that reflect current industry trends and school needs. | | | |
|---|---|---|---|
| Subcomponent: Communication and relationships | | | |
| Overarching Concepts | Ideal behaviors | Acceptable behaviors | Unacceptable behaviors |
| 1. Relationships and program expansion | Schools create strong, positive relationships with business partners. Educators and students get involved with industry events to expand college and career opportunities. | Stakeholders build positive relationships to create opportunities for students, though there may be limited effort made to expand program offerings. | Stakeholders do not build on the business relationship to create a mutually beneficial partnership or a plan that will benefit students. |
| 2. Time and resources | Time and resources are provided to establish academy advisory boards through organized, consistent, and structured collaboration meetings. | Some time and resources are allocated for stakeholders to meet and establish academy advisory boards. | Little to no resources are allotted to support the establishing advisory boards. |
| 3. Meeting structure | Meeting agendas are shared prior to each meeting, clearly and consistently communicating the purpose and outcomes for each meeting. | The purpose of and for meetings is communicated to members and participants. | There is poor communication between stakeholders. Few know the purpose of and for meetings. |
| 4. Attitude | Stakeholders show enthusiasm when working with students. | Stakeholders have a positive attitude and work well with students. | Participants have an attitude of entitlement and disrespect. |

The evolution of each behavior for the subcomponent can be found in Tables Z1, Z2, and Z3 in Appendix Z. Expert participants developed four ideal, acceptable, and unacceptable behaviors that were aligned using the following overarching concepts; relationships and program expansion, time and resources, meeting structure, and stakeholder attitude.

Table Z1 (ideal) and Table Z2 (unacceptable) include the Phase 2 Round 1 brainstorming responses, Phase 2 Round 3 strong or moderate endorsement percent, Phase 3 revisions, and the Phase 3 Round 3 strong or moderate endorsement percent. No revisions were suggested for the ideal behaviors in Phase 2 Round 2. In Phase 2 Round 3, behaviors #1, #2, and #4 received a strong or moderate endorsement of 70% or greater. In Phase 3, three expert participants suggested revisions to behavior #1, including expanding opportunities for students. Additionally, behavior #2 was revised to increase clarity, and behavior #3 was developed. In Phase 3 Round 3, expert participants strongly or moderately endorsed all behaviors.

No revisions were suggested for the unacceptable behaviors (Table Z2) in Round 2. In Phase 2 Round 3, behaviors #1a, #1b, #3, and #4 received a strong or moderate endorsement of 70% or greater. In Phase 3, behaviors #1a and #1b were combined to reduce redundancy, plus behaviors #3 and #4 were revised for clarity. Behavior #2 was developed from expert participant contributions. In Phase 3 Round 3, expert participants strongly or moderately endorsed all behaviors.

Table Z3 contains the acceptable behaviors developed in Phase 3 for the communication and relationships subcomponent. The table includes the Round 1 brainstorming responses, Round 2 revised behaviors, and the Round 3 percentage of strong or moderate endorsement. In Round 2, four expert participants suggested moving the positive, consistent, and open communication portion of behavior #3 to the ideal behavior description. In Round 3, all behaviors received a strong or moderate endorsement of 70% or greater.

## Summary

Over nine rounds of data collection, expert participants developed eight key features of the business collaboration component found in successful career academies and 255 behavioral variations. Consensus and inclusion in the IC maps were determined by a behavior receiving a strong or moderate endorsement of 70% or greater. By the final round of data collection, 242 behaviors reached the consensus threshold and were included in the IC maps. The ideal, acceptable, and unacceptable behavioral variations were aligned by creating 83 overarching concepts. The behavioral variations were organized into 20 subcomponents resulting in 20 IC maps.

Chapter 4 of this Delphi study on reinventing business collaborations for Hawai‘i career academies presented and described the data collection and analysis process for this study. Chapter 4 also provided evidence of the study’s credibility, transferability, dependability, and confirmability. Chapter 5 contains the summary and discussion of findings from this study. Chapter 5 also compares the findings of this study to current literature on the topic. Finally, Chapter 5 presents the limitations of this study, recommendations for further research, and positive social change.

# Chapter 5: Discussion, Conclusions, and Recommendations

## Introduction

Successful business collaborations in career academy model schools have the potential to innovate the public education setting. However, there is no extant literature which examines how business collaborations are implemented in Hawai‘i schools, nor studies that reinvent the business collaboration component to develop variations for a specific location. This Delphi study was developed to address these gaps. The purpose of this qualitative Delphi study was to develop possible variations of the business collaboration component found in successful career academies that meet the needs of Hawai‘i’s career academies. The qualitative Delphi method developed by Sekayi and Kennedy (2017) was applied to the IC map strategy to develop variations of the business collaboration component. Hawai‘i career academy teachers, school leaders, and business partners formed the expert group for this Delphi study. Consensus and inclusion in the IC maps were determined by a statement receiving a strong or moderate endorsement of 70% or greater.

Experts developed 20 IC maps over nine rounds of data collection separated by three phases. In Phase 1, experts developed and endorsed eight key features of the business collaboration component. In Phase 2, experts developed and endorsed initital ideal and unacceptable behavioral variations for each key feature. In Phase 3, acceptable behaviors were developed, endorsed, and aligned with corresponding ideal and uancceptable behaviors. Behaviors were aligned using 83 overarching concepts. By the final round of data collection, 242 behaviors reached the consensus threshold and were included in the IC maps. Findings from this study may be used by state, complex, school-

level leaders, and classroom teachers to support implementation of business collabortions in career academy high schools across the Hawaiian Islands.

## Interpretation of the Findings

Five components found in successful career academy model schools emerged from the literature review in Chapter 2: Cross-sector partnerships, collaboratively creating a shared vison for the school, rigorous curriculum themed to industry needs, diverse leadership opportunities, and data-driven decisions. The five components provided structure for interpreting the findings from this study. The eight key features of the business collaboration component developed and endorsed by expert participants paralleled the five components. Forming successful business collaborations is vital to each of the five components (Fletcher & Tyson, 2017; Fletcher et al., 2018; Hackmann et al., 2018, 2019; Hernández-Gantes et al., 2018; Lanford & Maruco, 2018; Malin et al., 2020; Malin & Hackmann, 2017, 2019).

In Chapter 2, the role of business collaborations and how business collaborations support elements of diffusion in educational settings were linked to each component (Table 4). Organizing the interpretation of findings by the five components details the connection between each component and the behavioral variations developed by expert participants.

### Cross Sector Partnerships

Business collaborations are one type of cross-sector partnership. All eight key features were associated with the development of cross-sector partnerships.

- Structured student internship/mentorship program: Schools and business partners collaborate to provide students with authentic experiences and training in career fields
- Faculty externships: Business partners communicate current industry trends, demands, and expectations to schools through faculty externships with business partners.
- Co-created career themed curriculum: Students engage with a cross-curricular career/industry-themed curriculum that is co-created by schools and business partners. The curriculum is problem/project-based and aligned with current industry and community needs as well as academic standards.
- Co-develop employability skills for students: School and business partners co-develop employability skills applicable to the academy's industry and ways to evaluate student performance with these skills.
- Work-based learning opportunities: Schools and business partners collaborate to provide work-based experiences (guest speakers, capstone courses, mock interviews, etc.) that help students plan and execute their post-high school goals.
- Students participate in business partner events: Students are offered service or volunteer opportunities at business partner events (job fairs, beach clean-ups, family fairs, etc.)
- Shared vision for partnership: Schools and business partners define outcomes, parameters, and purposes for the partnership.

- Academy advisory boards: Stakeholders form advisory boards to develop or evolve career academies and pathways that reflect current industry trends and school needs.

The eight key features collectively support the belief that business partnerships can provide industry-based input and actions that will help implement career academy components detailed in Chapter 2 (Fletcher & Tyson, 2017; Fletcher et al., 2018; Hackmann et al., 2018, 2019; Hernández-Gantes et al., 2018; Lanford & Maruco, 2018; Malin et al., 2020; Malin & Hackmann, 2017, 2019). Participants agreed that cross-sector partners are vital when developing career pathways, reviewing academy data (Hackmann et al., 2019), and should have leadership roles in the academy (Hackmann et al., 2018). The key features are consistent with the ideas represented in the conceptual framework that school leaders must collaborate with intra-educational and external networks to increase successful diffusion in an educational setting (Hung et al., 2015).

Participants developed behaviors stating that time and resources were required to implement the co-created career themed curriculum, co-develop employability skills for students, shared vision for partnership, and academy advisory boards key features. These behaviors support the finding that businesses can help supply schools with the technology, equipment (Hemelt et al., 2019; Kasza & Slater, 2017), and training (Fletcher & Tyson, 2017) required to implement career academies. I discuss further details concerning the role of business collaborations in the behavioral variations in the sections below.

**Collaboratively Creating a Shared Vision for the School**

One key feature was associated with the collaboratively creating a shared vision for the school component: Shared vision for partnership: Schools and business partners define outcomes, parameters, and purposes for the partnership. Including all stakeholders was an integral element of ideal behaviors developed for the Shared vision for partnership IC maps. Collectively, these ideal behaviors support the recommendation that business partners should be involved in the career academy's vision development process (Fletcher et al., 2018; Hernández-Gantes et al., 2018; Malin & Hackmann, 2017, 2019). Including a large number of an organization's stakeholders in multiple aspects of the decision process is consistent with a portion of the conceptual framework. Rogers (2003) called this practice increasing participation and states that it may increase sustainability and reduce implementation resistance.

Two subcomponents were formed to group the behavioral variations developed by expert participants for the Shared vision for partnership key feature, establishing vision and vision application. These subcomponents support the finding that creating a shared vision to unify direction and purpose and using the vision to determine teaching and learning practices are equally crucial parts of the academy development process (Fletcher et al., 2018).

Expert participants agreed that establishing a shared vision for the partnership required time to establish the vision, scheduled meetings with structure, communication, compromise, and alignment between the partnership’s, career academies, and business partners' vision. Behaviors developed for these overarching concepts support the finding from Malin and Hackmann (2017) that establishing a shared vision is a process requiring

communication, commitment, and buy-in from all stakeholders. Additionally, holding meetings that include all stakeholders in the vision development discussion was a strategy suggested by both Fletcher et al. (2018) and Malin and Hackmann (2017).

Expert participants agreed that vision application required incorporating the vision into curricula and using the vision to discuss partnership aspects. Behaviors developed for these overarching concepts support the finding from Fletcher et al. (2018) that a shared understanding of purpose should be used as a lens to identify implementation strategies, resources, curricular strategies, and WBL opportunities. Expert participants proposed extensions to this finding from Fletcher et al. (2018) by developing behaviors that include student interaction with the vision. In the incorporating vision into curricula ideal and acceptable behaviors, expert participants included students using the vision to develop goals. Expert participants also developed behavioral variations that included student reflection on or awareness of the vision reflection.

**Rigorous Curriculum Themed to Industry Needs**

Six key features were related to the rigorous curriculum themed to industry needs component. Two of the key features collectively provide support for the findings that business partners should have a role in developing and implementing an industry-relevant curriculum that prepares students with the post-secondary skills and knowledge they need to succeed after high school (Fletcher et al., 2018; Fletcher & Tyson, 2017; Hackmann et al., 2018; Hernández-Gantes et al., 2018; Kasza & Slater, 2017; Malin & Hackmann, 2019). The two key features were as follows:

- Co-created career themed curriculum: Students engage with a cross-curricular career/industry-themed curriculum that is co-created by schools and business

partners. The curriculum is problem/project-based and aligned with current industry and community needs as well as academic standards.

- Co-develop employability skills for students: School and business partners co-develop employability skills applicable to the academy's industry and ways to evaluate student performance with these skills.

Communication and collaboration with business partners are crucial to developing career-themed curricula and employability skills (Fletcher et al., 2018; Hackmann et al., 2018; Hernández-Gantes et al., 2018; Kasza & Slater, 2017; Malin & Hackmann, 2017, 2019). Expert participants proposed expansions to this finding by developing behaviors that described successful communication and collaboration practices; providing collaboration time with business partners to develop career-themed curriculum and employability skills, frequent collaboration meetings, consistent communication between all stakeholders, and a system to gather input from all stakeholders.

Expert participants agreed that business partners' contributions were important to developing career-themed curriculum (Fletcher & Tyson, 2017; Hackmann et al., 2018; Malin & Hackmann, 2019), integrating real-world contexts into the curriculum (Hackmann et al., 2018; Kasza & Slater, 2017; Malin & Hackmann, 2017), and adjusting the curriculum to align with current industry standards (Hackmann et al., 2018; Malin & Hackmann, 2019). Ideally, business partners would have an understanding of content standards to link suggested adjustments to preexisting course requirements. To advance the curriculum development process, participants agreed that forming a leadership structure is required.

Business partners also play an essential role in communicating industry-relevant skills to educators (Fletcher et al., 2018; Hernández-Gantes et al., 2018). Participants shared this view by forming behaviors that included business partner input when developing employability skills that align with industry demands, standards, and expectations (Fletcher et al., 2018; Fletcher & Tyson, 2017). Participants also developed behaviors stating that stakeholders needed to share an understanding of employability skills and how to implement them (Fletcher et al., 2018) and provide frequent opportunities for students to practice these skills (Hernández-Gantes et al., 2018).

Participants proposed extensions to the findings in the literature regarding employability skills. Behaviors were developed that addressed business partner collaboration on developing a tool to measure student performance with employability skills and provide feedback for growth. Additionally, participants agreed that all stakeholders should model professionalism to students by following the identified employability skills.

Another aspect of the rigorous curriculum themed to industry needs component is collaboration between school and business partners to develop and implement WBL opportunities for both teachers and students (Fletcher et al., 2018; Fletcher & Tyson, 2017; Hackmann et al., 2018; Hernández-Gantes et al., 2018; Kasza & Slater, 2017; Lanford & Maruco, 2018; Malin & Hackmann, 2017, 2019). Four key features addressed business partners' roles in aspects of WBL development and implementation:

- Work-based learning opportunities: Schools and business partners collaborate to provide work-based experiences (guest speakers, capstone courses, mock

interviews, etc.) that help students plan and execute their post-high school goals.

- Students participate in business partner events: Students are offered service or volunteer opportunities at business partner events (job fairs, beach clean-ups, family fairs, etc.)
- Structured student internship/mentorship program: Schools and business partners collaborate to provide students with authentic experiences and training in career fields.
- Faculty externships: Business partners communicate current industry trends, demands, and expectations to schools through faculty externships with business partners.

The role of business partners is a central element of the behavioral variations developed for each of these four key features. These behaviors support finings in the review of the literature that states WBL should incorporate business-partner involvement in career exploration (Hernández-Gantes et al., 2018; Lanford & Maruco, 2018; Malin et al., 2020; Sun & Spinney, 2017), including student internships (Hackmann et al., 2018; Hernández-Gantes et al., 2018; Kasza & Slater, 2017; Lanford & Maruco, 2019; Malin et al., 2020; Sun & Spinney, 2017), and opportunities for students to network with industry professionals (Hackmann et al., 2018; Malin & Hackmann, 2017; Sun & Spinney, 2017).

Behaviors were developed that confirmed prior research describing business partner involvement in developing WBL opportunities. Expert participants agreed that WBL opportunities should be rooted in real-world scenarios (Fletcher et al., 2018; Kasza & Slater, 2017; Malin & Hackmann, 2017; Sun & Spinney, 2017) that align with career

pathway themes (Hernández-Gantes et al., 2018; Lanford & Maruco, 2019), and give students opportunities to practice soft skills (Hernández-Gantes et al., 2018).

Mutually beneficial partnerships between business partners and schools are prevalent in successful career academies (Fletcher et al., 2018; Malin & Hackmann, 2017). Expert participants concurred with this finding by developing an ideal behavior stating that WBL opportunities have a clear return on investment for all stakeholders. Participants emphasized the need for a strong intermediary to support the partnership structure (Lanford & Maruco, 2018). Though the intermediary positions were not defined in this study, two were identified in the literature as essential to the success of a career academy; academy coordinator (Lanford & Maruco, 2019) and career academy coach (Hackmann et al., 2018; Malin et al., 2020; Malin & Hackmann, 2017).

Behaviors developed by expert participants reflected elements of successful internship programs found in previous research. To develop an internship program, expert participants agreed that forming collaborative relationships between business partners and schools (Fletcher et al., 2018; Malin et al., 2020), establishing trust (Lanford & Maruco, 2018; Malin et al., 2020; Malin & Hackmann, 2019), managing conflict through compromise (Malin & Hackmann, 2019), and frequent collaboration (Fletcher et al., 2018; Hackmann et al., 2018) were critical elements. Lanford and Maruco (2018) stated that school personnel should become familiar with industry terminology. Malin and Hackmann (2019) reported that one career academy developed memorandums of understanding with their business partners to increase understanding and accountability. Participants supported these findings by forming behaviors that included accountability, commitment to an agreed-upon plan, and creating a common language and terminology.

Participants also agreed that student internships should reflect authentic experience in the career field (Fletcher et al., 2018; Hackmann et al., 2018; Hernández-Gantes et al., 2018; Lanford & Maruco, 2019; Sun & Spinney, 2017), include a degree of flexibility to increase student participation (Lanford & Maruco, 2019), and result in long-term benefits for students (Hackmann et al., 2018; Lanford & Maruco, 2018, 2019). However, potential internship locations and business partners, such as mentors, should be vetted to ensure student safety (Lanford & Maruco, 2019; Hackmann et al., 2018; Malin et al., 2020; Malin & Hackmann, 2019). While paid internships (Hemelt et al., 2019), financial compensation for extracurricular time, or course credit (Lanford & Maruco, 2019) were mentioned in previous research, participants in this study stated that, ideally, internship participation should exceed graduation requirements.

Participants determined that collaboration with business partners to develop an application process that identified students for the internship mentorship program was essential. The application process should promote student self-advocacy, commitment to completing the program, and allow students to choose internship locations. Before application submission, stakeholders should have an avenue to ask questions and supply feedback. Though Kasza and Slater (2017) stated that best practices included recruitment, parent involvement, and student responsibility for learning, the role of business partners was not addressed in the practices.

Fletcher et al. (2018) also indicated that internship programs required structure and that student interns needed guidance in the workplace. Hackmann et al. (2018) stated that business-level mentors should be assigned to students. Participants agreed with these findings and proposed extensions by developing behaviors that addressed assigning

business and school level mentors, defining mentor roles and responsibilities, communicating these roles to students, meetings between mentors and students, discussing program improvements with students, discussing professionalism expectations, and mentor recruitment. However, business partner participation should be voluntary (Hernández-Gantes et al., 2018). This finding was reflected in the formation of behaviors stating that mentors should volunteer for their position.

Participants agreed that faculty externships should be created so business partners can communicate current industry trends, demands, and expectations to schools. Ideally, leaders from businesses and schools would collaborate to organize and run the events. This supports findings that business partners should run professional development for educators to keep them up to date with industry needs, trends, and skills (Fletcher et al., 2018; Fletcher & Tyson, 2017). In turn, teachers will bring industry skills and soft skills to the classroom (Fletcher & Tyson, 2017; Hackmann et al., 2018; Sun & Spinney, 2017). Behaviors were developed that extended beyond the findings from the review of the literature. Participants agreed that externships should align with career pathways offered by the academy, address teacher needs and gaps, involve internship program mentors, and include time to plan and debrief with business partners. Ensuring positive interactions between externship participants was also indicated as essential and communicating externship outcomes to participants. The behavioral variations developed for the Faculty Externships key feature are consistent with the ideas represented in the conceptual framework that teacher apprenticeships with business partners will strengthen professional development (Hung et al., 2015).

Behaviors developed for the Students Participate in Business Partner Events key feature extended beyond the findings from the review of the literature. Though previous research mentioned providing opportunities for students to network with industry professionals (Hackmann et al., 2018; Malin & Hackmann, 2017; Sun & Spinney, 2017), no specific events or details were listed. The events go beyond typical WBL opportunities to include students volunteering at business-sponsored beach clean-ups, family fairs, job fairs, or similar events. Participants agreed that students should be offered multiple volunteer experiences, welcomed at the events, and expected to adhere to employability skill expectations. Preparing students in advance, following up after the events, and providing adult interaction guidelines were also addressed in behavioral variations.

**Diverse Leadership Opportunities**

One of the key features was related to the diverse leadership opportunities component.

- Academy advisory boards: Stakeholders form advisory boards to develop or evolve career academies and pathways that reflect current industry trends and school needs.

One diverse leadership opportunity that should be made available to business partners is involvement with academy advisory boards and contributing to academy-based leadership decisions (Fletcher et al., 2018; Hackmann et al., 2018; Hernández-Gantes et al., 2018; Malin et al., 2020; Malin & Hackmann, 2017, 2019). Participants agreed with this finding by developing a behavior stating that diverse stakeholder groups should be represented on academy advisory boards. Behaviors were developed outlining the purposes of the advisory board; evolving career pathways of the academy based on

business partner input (Hackmann et al., 2018; Malin et al., 2020; Malin & Hackmann, 2019), and expanding college and career opportunities for students by forming strong stakeholder relationships (Hernández-Gantes et al., 2018).

Regular advisory board meetings are required to achieve these purposes (Hackmann et al., 2019) and maintain cross-sector communication (Malin et al., 2020). Malin and Hackmann (2019) noted that industry leaders monitored the progress of an academy to ensure accountability. Participants agreed with this finding by creating a behavior addressing the need for follow-through by stakeholders. These behavioral variations are consistent with the ideas represented in the conceptual framework that business partners should be given leadership roles to inform and train educators about current industry needs (Hung et al., 2015).

Expert participants expanded previous findings by developing behaviors that addressed the provision of time and resources to establish advisory boards, member attendance and participation in meetings, and communicating the purpose of meetings to board members in advance. Participants also agreed that stakeholders needed to have a positive attitude while working with student representatives on the advisory board.

**Data-Driven Decisions**

Though no key feature was developed explicitly addressing data-driven decisions, behaviors that incorporate the use of data were dispersed throughout IC maps of four key features. The overarching concept containing data-related behaviors is listed below in parentheses after the key feature in which they occur.

- Structured student internship/mentorship program: Schools and business partners collaborate to provide students with authentic experiences and training in career fields *(student growth, discussing improvements, roles and responsibilities)*.
- Co-created career themed curriculum: Students engage with a cross-curricular career/industry-themed curriculum that is co-created by schools and business partners. The curriculum is problem/project-based and aligned with current industry and community needs as well as academic standards *(industry integration, adjusting curriculum)*.
- Co-develop employability skills for students: School and business partners co-develop employability skills applicable to the academy's industry and ways to evaluate student performance with these skills *(measuring skills, skills alignment, stakeholder input)*.
- Academy advisory boards: Stakeholders form advisory boards to develop or evolve career academies and pathways that reflect current industry trends and school needs (*career integration*).

Hackmann et al. (2019) stated that business partners should be included when reviewing data for continuous improvement. Participants incorporated continuous improvement into two behaviors; (a) the shortcomings of the school and business should be discussed to improve the internship mentorship program, and (b) students have opportunities to provide feedback on the mentoring experience. Fletcher et al. (2018) stated that student progress in an internship program should be monitored through data collection. Expert participants expanded this finding by stating that student growth should be analyzed,

discussed, and used to drive decisions about changes to student placement in the internship program.

Business partners can also be involved in data-driven decisions by providing current employment data (Hackmann et al., 2019; Malin & Hackmann, 2019) and providing skills and knowledge articulation feedback (Fletcher et al., 2018; Hackmann et al., 2018; Kasza & Slater, 2017). This finding was reflected in behaviors that stated business partners should share current industry trends and needs to propose career pathway evolutions, update curriculum, increase industry integration into curricula, and develop employability skills. However, participants agreed that the development of a structured system to gather and discuss input from all stakeholders is essential. One behavior stated that employability skills should be measured with a rubric developed through school and business partner collaboration. This rubric should also be used to provide students with feedback regarding their skill performance.

## Limitations of the Study

This study has several limitations. The primary limitations were sample size and participant attrition. The ideal sample size for this study was 15 participants, five from each of the three stakeholder groups; Hawai‘i career academy teachers, school leaders, and business partners. Students and district personnel were excluded from this study. Including participants from these groups could add further dimensions to implementing business collaborations in Hawai‘i career academies. Though participant size for Delphi studies is debatable, ranging anywhere from seven to 30 participants (Rowe & Wright, 2001; Clayton, 1997 as cited by Omer Attali & Yemini, 2017), 15 participants is still a relatively small sample size given the potential pool of participants.

Additionally, full participation in all rounds of data collection by all participants did not occur in this study. According to Buck et al. (1993), this lack of full participation adversely affects trustworthiness. The threshold of 70% participation suggested by Hasson, Kenney, and McKenna (2000) was achieved or nearly achieved in seven rounds of data collection. However, in Round 2 and Round 3 of Phase 3, participation rates dropped significantly to 60% and 53%, respectively.

The participation rate by business partners was the lowest of the three participant groups overall. Unless employed by the company conducting the Delphi study, research participation decreased by 40% in later rounds of data collection (Kosloski & Ritz, 2016; Mohr & Shelton, 2017; Omer Attali & Yemini, 2017). Although the business partners that participated in this study met the recruitment criteria of either collaborating with a Hawai‘i high school or serving on a career academy board of directors, they were not directly employed by the school. This factor may explain the low participation rates by business partners in each round.

The COVID-19 pandemic exacerbated participant-related limitations. The data collection approval delay placed initial recruitment at the school year beginning during the transition to complete, synchronous, distance learning. This was an extremely stressful time for teachers and school leaders. Business partners were also severely impacted as the pandemic lengthened lockdowns and tourism across the islands ceased. This immense stress greatly impacted the number of experts that may have participated in this study under different conditions. Most who did participate in the study were attentive and held a genuine interest in the purpose of this study. However, some participants were not able to complete the data collection rounds in the allotted time frames. The data

collection rounds were lengthened to increase participation and accommodate holidays on several occasions. However, the extended timeframe of the study may have increased participant fatigue.

Another limitation that arose was participant location demographics. While invitations to this study were sent to schools across five of the Hawaiian Islands, all who participated in this study were located on one island. The variations created in this study may not transfer to career academies on other Hawaiian Islands due to their specific circumstances and populations, nor to elementary, post-secondary, or Hawai‘i high schools that are not career academy model schools. Including participants from across multiple Hawaiian Islands would increase the transferability of results to meet the needs of any Hawai‘i career academy. Limiting the scope of this study to the Hawaiian Islands may also limit transferability to schools outside of the state.

While using an online questionnaire platform as the data collection format for the Delphi process came with benefits, some limitations also emerged. In Round 1 of data collection for each phase, some participant responses were vague or did not seem to address the nature of the prompt. Coupled with the anonymity of the Delphi process, I could not contact a specific participant to address their responses or send clarifications about the nature of a question. Using an interview setting for Round 1 of each data collection phase may have resulted in more concise data through follow-up questions. Using a virtual platform for the interviews would provide similar benefits as the online questionnaire platform. The benefits include allowing the inclusion of participants from geographically remote or diverse locations in a time and cost-effective manner (Brady, 2015) and conforming to participants’ schedules as working professionals.

## Recommendations

Considering this study's findings, scope, and methodology, several recommendations for further research can be suggested. Findings from this study could be expanded by conducting additional research that includes a broader participant demographic. This study provided insights concerning behavioral variations of the business collaboration component, but only from the perspective of Hawai‘i career academy teachers, school leaders, and business partners located on one island. Conducting additional research with Hawai‘i career academy students, district personnel, and experts from career academies across the Hawaiian islands may yield additional insights and broader perspectives.

I would also recommend using an interview format for at least Round 1 of the qualitative Delphi process to further study and expand the key features and behavioral variations developed in this study. The interview format would allow researchers to ask follow-up questions to increase the clarity and depth of participant responses. I would also recommend further studies that focus on the implementation of specific key features of the business collaboration component developed in this study; structured student internship mentorship programs, faculty externships, co-created career-themed curriculum, co-developed employability skills for students, WBL opportunities, students participating in business partner events, creating a shared vision for partnerships, and academy advisory boards. I also recommend further studies that apply the IC map strategy to reinvent other components of the career academy model to meet the specific needs of any school.

## Implications

### Positive Social Change

The results from this study can potentially influence the implementation of business collaborations in Hawai‘i career academy model schools. The behavioral variations developed in this study may result in increased adoption rates and sustainability of the business collaboration innovation in Hawai‘i career academies. Current career academy research associates the model with positive impacts on many measurements of student success (Clearinghouse, 2015; Fletcher et al., 2018; Hackmann et al., 2019; Hemelt et al., 2019; Kemple & Willner, 2008; Lanford & Maruco, 2018; Malin et al., 2020; NCAC, 2019; Sun & Spinney, 2017). Hawai‘i schools need the social change of the career academy model to close the performance gap between actual and desired student achievement (ACT, 2019; Strive HI, 2019). These increases in student success could also occur in Hawai‘i career academy schools with successful and sustained implementation of the business collaboration component.

### Methodological, Theoretical, and Empirical Implications

This study was the first of studies on developing possible variations of the business collaboration component using the IC mapping strategy, a qualitative Delphi framework, and an emphasis on Hawai‘i’s career academy teachers, school leaders, and business partners. This study shows that the Delphi method can be applied to the IC mapping strategy to develop variations of the business collaboration component. Career academy stakeholders may also apply the IC development process as a strategy for developing variations of future innovations for Hawai‘i high schools. While the participant demographic was too small to transfer results to all career academy model

schools, the method used in this study could be replicated to develop variations for business collaboration implementation in other locations.

### Recommendations for Practice

The purpose of this study was to develop possible variations of the business collaboration component found in successful career academies that meet the needs of Hawai‘i’s career academies. The behavioral variations developed by the panel of experts who participated in this study can be used by Hawai‘i state, complex, school-level leaders, classroom teachers, and business partners as guidelines implement business collaborations. Hawai‘i career academies can also use the IC maps developed by this research to strengthen and expand existing business collaboration efforts. Career academy stakeholders can also apply the IC development process as a strategy for developing variations of future innovations for Hawai‘i high schools.

## Conclusions

Successful business collaborations in career academy model schools have the potential to innovate the public education setting. While many Hawai‘i high schools have adopted the career academy model to meet the innovative goals set by the state’s department and board of education, few guidelines exist for implementing business collaborations in new and unique settings. This study developed 20 IC maps providing behavioral variations that could be used as guidelines to aid the implementation of business collaborations in Hawai‘i career academies. The key features and behavioral variations proposed by the panel of Hawai‘i career academy experts in this study can help increase adoption rates and sustain the implementation of the business collaboration innovation in Hawai‘i career academies.

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Appendix A: Study Invitation

**Invitation**

Aloha (Name),

I hope this email finds you well.

My name is Jennifer Slotter Clawson and I am in the Walden PhD program. As part of my dissertation, I am conducting a study to develop possible variations of the business collaboration component found in successful career academies that meet the needs of Hawai‘i’s career academies. I am seeking Hawai‘i career academy teachers, school leaders, and business partners that wish to contribute their expertise and experience with business collaborations or work-based learning environments. If you feel that this study may contribute valuble insights for you and your school, I ask that you consider participating and forwarding this email to your career academie’s teachers, school leaders, and business partners. I am seeking individuals that meet at least one of the creiteria listed below.

| Category | Requirements |
|---|---|
| Teacher | Currently employed as a CTE teacher at a Hawai‘i high school and frequently implements work-based learning in some form in their classroom.<br><br>Minimum of two years of employment as a classroom teacher in a Hawai‘i career academy and implements some form of work-based learning in their classroom.<br><br>Minimum of two years of employment as a classroom teacher in a Hawai‘i high school that recently transitioned into the career academy model and implements work-based learning in some form in their classroom. |
| School leader | Minimum of two years of employment as a school leader in a Hawai‘i career academy.<br><br>Minimum of two years of employment as a school leader at a high school that recently transitioned into the career academy model. |
| Business partner | Two years of business collaboration experience with a Hawai‘i high school.<br><br>Minimum of two years of experience serving on a career academy board of directors. |

If you are interested in participating in this study, please select the *yes I want to participate* hyperlink below. This link will transfer the Informed Consent document. If you agree to the terms in the consent form, select *I agree*. You will then be asked to type your name and the best email address to contact you for the duration of the study. This is the only time you will be required to supply your name and personal information. This information will not be linked to the responses you supply in the study. You will then receive an email confirming your enrollment in this study.

Data collection for this study will occur online through Google Forms. Data collection will occur in three phases. Each phase will consist of three rounds. Each round of data collection will occur once and participants will have one week period to contribute to

each round. This will require a three week period for each data collection phase. A questionnaire guide is provided as an attachment in this email so you may preview the content of this study and the expectations for each data collection round.

Please let me know if you would like to participate. The study has deadlines, so we'll need to begin the process by (  ) and finish data collection by (  ).

You can contact me by phone or e-mail if you have any questions.

Mahalo nui loa!

Appendix B: Exiting Statement for Study

**Exiting Statement**

Maʻhalo nui loa for your time and willingness to participate in this study. Your time has helped me develop an innovation configuration (IC) map for Hawaiʻi career academies to provide possible variations of the businesses collaboration component found in successful career academies. The variations should increase and sustain adoption rates of the business collaboration component in Hawaiʻi career academies (Hall & Hord, 1984; Hall & Loucks, 1978; Loucks, 1983; Rice & Rogers, 1980; Rogers, 2003).

Appendix C: Delphi Instrument Guide

**Table 39**

*Delphi Instrument Guide*

| Data Phase and RQ alignment → | Data Round → | Questionnaire prompt |
|---|---|---|
| 1. Phase 1<br><br>RQ 1a: What key features of the business collaboration component will Hawai‘i career academy stakeholders develop to build variations that meet their specific needs? | Round 1 | P1R1. Generate a list of key features of the business collaboration component found in successful career academies. |
| | Round 2 | P1R2. The following themes emerged from the Round 1 data collection. Please review these themes and add any comments or concerns you might have with them or their wording or meaning. |
| | Round 3 | P1R3. Please rank each statement according to your level of endorsement. |
| 2. Phase 2<br><br>RQ 1b: What behavioral variations will Hawai‘i career academy stakeholders develop to support implementation of business collaboration key features? | Round 1 | P2R1. For each component identified in phase one, what are ideal and unacceptable behaviors of school leaders, business partners, and teachers that will help establish business collaborations in Hawai‘i’s career academies? |
| | Round 2 | P2R2. The following themes emerged from the first round of data collection. Please review these themes and add any comments or concerns you might have with them or their wording or meaning. |
| | Round 3 | P2R3. Please rank each statement according to your level of endorsement. |
| 3. Phase 3<br><br>RQ 1: What possible variations of the business collaboration component found in successful career academies will Hawai‘i career academy stakeholders develop to meet their specific needs? | Round 1 | P3R1. For each component identified in phase one, what are acceptable (not ideal, but not unacceptable) behavior variations of school leaders, business partners, and teachers that will help establish business collaborations in Hawai‘i’s career academies? |
| | Round 2 | P3R2. The following themes emerged from the first round of data collection. Please review these themes and add any comments or concerns you might have with them or their wording or meaning. |
| | Round 3 | P3R3. Please rank each statement according to your level of endorsement. |

Appendix D: Email Thanking Invitee for their Time

**Email Thanking Invitee**

Maʻhalo nui loa for your time and consideration. If you know any Hawaiʻi teachers, school leaders, or business partners over the age of 18 that might wish to participate in this study, please contact me by phone or e-mail.

Appendix E: Email Confirming Participant Enrollment in Study

**Confirmation Email**

You are confirmed as a participant in a research study about forming business collaborations in Hawai‘i career academies. Data collection will begin on ( ). On (Start date), you will receive an email linking you to the first round of data collection. Each round of data collection will occur once and will take place over a one week period.

Ma‘halo nui loa for your time and willingness to participate in this study.

Appendix F: Delphi Instrument Phases and Rounds

**Phase 1 Round 1: Business Collaboration Features**

I am a Hawai‘i career academy/CTE...
*Select one.*

- ☐ Teacher
- ☐ School Leader
- ☐ Business Partner

**Key Features**

Generate a list of key features, or elements, of the business collaboration component found in successful career academies. These features might include 'forming career-themed curriculum' or 'providing internships.' You may generate as many key features as you see fit. Features should stretch to all aspects of what business collaborations in Hawai‘i career academies might provide to all stakeholders.

**Phase 1 Round 2: Business Collaboration Features Refinement**

I am a Hawai‘i career academy/CTE...
*Select one.*

- ☐ Teacher
- ☐ School Leader
- ☐ Business Partner

The following themes emerged from the first round of data collection. Please review these themes and add any comments or concerns you might have with them, their wording, or meaning. If you have no edits or additions to suggest, please list NA.

1. Structured student internship/mentorship programs providing authentic career experiences.

2. Faculty externships with business partners increase communication of industry needs.

3. Schools and business partners co-create industry/career themed curriculum that allow a seamless transition between high school to either college courses or career advancement .

4. Co-develop Employability/ Soft Skills applicable to the academy's career/industry.

5. Provide work-based learning opportunities (guest speaking, judging student projects, mock interviews, etc.) raising awareness of current industry trends helping students plan and execute their post-high school goals.

6. Students participate in business partner sponsored events (beach clean-ups, family fairs, etc.) to form external relationships with business partners.

7. Form a shared vision of outcomes, parameters, and purposes for the partnership.

8. Form academy advisory boards to develop career pathways within the academy.

**Phase 1 Round 3 Business Collaboration Features**

I am a Hawai‘i career academy/CTE...
*Select one.*

- ☐ Teacher
- ☐ School Leader
- ☐ Business Partner

**Please rank each statement according to your level of endorsement.**

*All those with an average ranking of moderately or strongly endorsed will progress to the next phase.*

1. Structured Student Internship/Mentorship Program: Schools and business partners collaborate to provide students with authentic experiences and training in career fields.

    - ☐ I do not endorse this statement
    - ☐ I minimally endorse this statement
    - ☐ I moderately endorse this statement
    - ☐ I strongly endorse this statement

    Is there a specific portion of the definition that you dislike/disagree with and why?

    Is there a specific portion of the definition that you like/agree with and why?

2. Faculty Externships: Schools and business partners communicate current industry trends, demands, and expectations through faculty externships with business partners.

    - ☐ I do not endorse this statement
    - ☐ I minimally endorse this statement
    - ☐ I moderately endorse this statement
    - ☐ I strongly endorse this statement

    Is there a specific portion of the definition that you dislike/disagree with and why?

    Is there a specific portion of the definition that you like/agree with and why?

3. Co-Created Career Themed Curriculum: Students engage with a cross-curricular career/industry themed curriculum co-created by schools and business partners.

The curriculum is problem/project-based, aligning with current industry and community needs.

- ☐ I do not endorse this statement
- ☐ I minimally endorse this statement
- ☐ I moderately endorse this statement
- ☐ I strongly endorse this statement

Is there a specific portion of the definition that you dislike/disagree with and why?

Is there a specific portion of the definition that you like/agree with and why?

4. Co-develop Employability Skills for Students: School and business partners co-develop employability skills applicable to the academy's industry and ways to evaluate student performance with these skills.

   - ☐ I do not endorse this statement
   - ☐ I minimally endorse this statement
   - ☐ I moderately endorse this statement
   - ☐ I strongly endorse this statement

   Is there a specific portion of the definition that you dislike/disagree with and why?

   Is there a specific portion of the definition that you like/agree with and why?

5. Work-Based Learning Opportunities: Schools and business partners collaborate to provide work-based learning experiences (guest speakers, capstone courses, mock interviews, etc.) that help students plan and execute their post-high school goals.

   - ☐ I do not endorse this statement
   - ☐ I minimally endorse this statement
   - ☐ I moderately endorse this statement
   - ☐ I strongly endorse this statement

   Is there a specific portion of the definition that you dislike/disagree with and why?

   Is there a specific portion of the definition that you like/agree with and why?

6. Students Participate in Business Partner Events: Students are offered volunteer opportunities at business partner events (job fairs, beach clean-ups, family fairs, etc.).

- ☐ I do not endorse this statement
- ☐ I minimally endorse this statement
- ☐ I moderately endorse this statement
- ☐ I strongly endorse this statement

Is there a specific portion of the definition that you dislike/disagree with and why?

Is there a specific portion of the definition that you like/agree with and why?

7. Shared Vision for Partnership: Schools and business partners define outcomes, parameters, and purposes for the partnership.

   - ☐ I do not endorse this statement
   - ☐ I minimally endorse this statement
   - ☐ I moderately endorse this statement
   - ☐ I strongly endorse this statement

   Is there a specific portion of the definition that you dislike/disagree with and why?

   Is there a specific portion of the definition that you like/agree with and why?

8. Academy Advisory Boards: Stakeholders form advisory boards to develop or evolve career academies and pathways that reflect current industry trends and school needs.

   - ☐ I do not endorse this statement
   - ☐ I minimally endorse this statement
   - ☐ I moderately endorse this statement
   - ☐ I strongly endorse this statement

   Is there a specific portion of the definition that you dislike/disagree with and why?

   Is there a specific portion of the definition that you like/agree with and why?

**Phase 2: Round 1: Business Collaboration Behaviors**

I am a Hawai‘i career academy/CTE...
*Select one.*

- ☐ Teacher
- ☐ School Leader
- ☐ Business Partner

1. Structured Student Internship/Mentorship Program: Schools and business partners collaborate to provide students with authentic experiences and training in career fields.

   What are IDEAL behaviors that teachers, school leaders, and business partners might exhibit to help establish the students participate in business partner sponsored events element?

   What are UNACCEPTABLE behaviors that teachers, school leaders, and business partners might exhibit which would hinder establishment of the students participate in business partner sponsored events element?

2. Faculty Externships: Business partners communicate current industry trends, demands, and expectations to schools through faculty externships with business partners.

   What are IDEAL behaviors that teachers, school leaders, and business partners might exhibit to help establish the students participate in business partner sponsored events element?

   What are UNACCEPTABLE behaviors that teachers, school leaders, and business partners might exhibit which would hinder establishment of the students participate in business partner sponsored events element?

3. Co-Created Career Themed Curriculum: Students engage with a cross-curricular career/industry themed curriculum co-created by schools and business partners. The curriculum is problem/project-based and aligned with current industry and community needs as well as academic standards.

   What are IDEAL behaviors that teachers, school leaders, and business partners might exhibit to help establish the students participate in business partner sponsored events element?

   What are UNACCEPTABLE behaviors that teachers, school leaders, and business partners might exhibit which would hinder establishment of the

students participate in business partner sponsored events element?

4. Co-develop Employability Skills for Students: School and business partners co-develop employability skills applicable to the academy's industry and ways to evaluate student performance with these skills.

    What are IDEAL behaviors that teachers, school leaders, and business partners might exhibit to help establish the students participate in business partner sponsored events element?

    What are UNACCEPTABLE behaviors that teachers, school leaders, and business partners might exhibit which would hinder establishment of the students participate in business partner sponsored events element?

5. Work-Based Learning Opportunities: Schools and business partners collaborate to provide work-based experiences (guest speakers, capstone courses, mock interviews, etc.) that help students plan and execute their post-high school goals.

    What are IDEAL behaviors that teachers, school leaders, and business partners might exhibit to help establish the students participate in business partner sponsored events element?

    What are UNACCEPTABLE behaviors that teachers, school leaders, and business partners might exhibit which would hinder establishment of the students participate in business partner sponsored events element?

6. Students participate in business partner events: Students are offered service or volunteer opportunities at business partner events (job fairs, beach clean-ups, family fairs, etc.).

    What are IDEAL behaviors that teachers, school leaders, and business partners might exhibit to help establish the students participate in business partner sponsored events element?

    What are UNACCEPTABLE behaviors that teachers, school leaders, and business partners might exhibit which would hinder establishment of the students participate in business partner sponsored events element?

7. Shared Vision for Partnership: Schools and business partners define outcomes, parameters, and purposes for the partnership.

    What are IDEAL behaviors that teachers, school leaders, and business partners might exhibit to help establish the students participate in business partner sponsored events element?

What are UNACCEPTABLE behaviors that teachers, school leaders, and business partners might exhibit which would hinder establishment of the students participate in business partner sponsored events element?

8. Academy Advisory Boards: Stakeholders form advisory boards to develop or evolve career academies and pathways that reflect current industry trends and school needs.

    What are IDEAL behaviors that teachers, school leaders, and business partners might exhibit to help establish the students participate in business partner sponsored events element?

    What are UNACCEPTABLE behaviors that teachers, school leaders, and business partners might exhibit which would hinder establishment of the students participate in business partner sponsored events element?

**Phase 2: Round 2: Business Collaboration Behaviors**

I am a Hawai‘i career academy/CTE...
*Select one.*

- ☐ Teacher
- ☐ School Leader
- ☐ Business Partner

In this round, you will be reviewing the statements that emerged from the last questionnaire and have an opportunity to add to, edit, comment, and question them.

1. **Structured Student Internship/Mentorship Program: IDEAL behaviors that teachers, school leaders, and business partners might exhibit to help establish the element.**

   *Schools and business partners collaborate to provide students with authentic experiences and training in career fields.*

**Sub Component: Collaboration**

Please review the descriptions that emerged from the last questionnaire round. Please check any statements that feel might require additions, edits, or clarification. You may also check items to voice concerns with their wording, meaning, or to merge items together. If you agree with all statements as they appear, please check NA.

- ☐ A. Strong collaborative relationship between business partners and schools
- ☐ B. Foster collaboration by understanding and respecting each other.
- ☐ C. Commitment to the decided plan whether or not in total agreement
- ☐ D. Accountable for identified responsibilities
- ☐ E. Trust in each other's intent.
- ☐ F. Stakeholders collaborate to find internships have long-term benefits for students: not just graduation requirement
- ☐ NA

For ALL items you checked above, please list your comments, concerns, additions, or edits below. Please letter your responses to match the letter of the item(s) you checked (e.g. if you checked E above, type E- below then your suggestions). Write NA if you did not select any items above.

**Sub Component: Communication**

Please review the descriptions that emerged from the last questionnaire round. Please check any statements that feel might require additions, edits, or clarification. You may also check items to voice concerns with their wording, meaning, or to merge items together. If you agree with all statements as they appear, please check NA.

- ☐ A. Student-centered discussions that focus on realistic expectations and outcomes for students
- ☐ B. Create common language and terminology
- ☐ C. Regular and consistent communication between stakeholders.
- ☐ D. Open-minded discussions of all ideas and issues with room for respectful, constructive conflict.
- ☐ NA

For the items you checked above, please list your comments, concerns, additions, or edits below. Please letter your responses to match the letter of the item(s) you checked. (e.g. if you checked E above, type E- below then your suggestions). Write NA if you did not select any items above.

**Sub Component: Student Participation in Program**

Please review the descriptions that emerged from the last questionnaire round. Please check any statements that feel might require additions, edits, or clarification. You may also check items to voice concerns with their wording, meaning, or to merge items together. If you agree with all statements as they appear, please check NA.

- ☐ A. Flexibility in timeline/ability for students to participate
- ☐ B. Application process to identify students for mentorship/internship program
- ☐ C. Expectations for program are clearly communicated to students
- ☐ D. Students allowed to apply to a specific mentorship/internship location
- ☐ E. Require students to self-advocate demonstrating their dedication, responsibility, and endurance to complete a mentorship/internship assignment.
- ☐ F. Safety of students is ensured by vetting potential mentors and internship locations
- ☐ G. Lifelong learner
- ☐ NA

For the items you checked above, please list your comments, concerns, additions, or edits below. Please letter your responses to match the letter of the item(s) you checked. (e.g. if you checked E above, type E- below then your suggestions). Write NA if you did not select any items above.

**Sub Component: Mentors**

Please review the descriptions that emerged from the last questionnaire round. Please check any statements that feel might require additions, edits, or clarification. You may also check items to voice concerns with their wording, meaning, or to merge items together. If you agree with all statements as they appear, please check NA.

- ☐ A. Discuss aspects of professionalism with students and model professionalism to students
- ☐ B. Scheduled timeline for meetings between student and their mentors (business and school level)
- ☐ C. Clearly defined roles and responsibilities for school and business level mentors.
- ☐ D. Program is structured and well organized
- ☐ NA

For the items you checked above, please list your comments, concerns, additions, or edits below. Please letter your responses to match the letter of the item(s) you checked. (e.g. if you checked E above, type E- below then your suggestions). Write NA if you did not select any items above.

1. **Student Internship/Mentorship Program: UNACCEPTABLE behaviors that teachers, school leaders, and business partners might exhibit which would hinder establishment of the element.**

   *Schools and business partners collaborate to provide students with authentic experiences and training in career fields.*

**Sub Component: Collaboration**

Please review the descriptions that emerged from the last questionnaire round. Please check any statements that feel might require additions, edits, or clarification. You may also check items to voice concerns with their wording, meaning, or to merge items together. If you agree with all statements as they appear, please check NA.

- ☐ A. Lack of commitment to agreed upon plan
- ☐ B. Skepticism of each other's intent.
- ☐ C. Decisions not student-centered
- ☐ D. Unwilling to compromise
- ☐ E. Toxic conflict
- ☐ F. Politicking
- ☐ NA

For the items you checked above, please list your comments, concerns, additions, or edits below. Please letter your responses to match the letter of the item(s) you checked (e.g. if you checked E above, type E- below then your suggestions). Write NA if you did not select any items above.

**Sub Component: Communication**

Please review the descriptions that emerged from the last questionnaire round. Please check any statements that feel might require additions, edits, or clarification. You may also check items to voice concerns with their wording, meaning, or to merge items together. If you agree with all statements as they appear, please check NA.

- ☐ A. Lack of prompt, efficient, and open communication
- ☐ B. No communication about student growth or changes to student placement
- ☐ C. Arrangements for internship/mentorship are made without business partner knowledge or approval
- ☐ D. Retention of ideas and issues as a result of passive aggressiveness
- ☐ NA

For the items you checked above, please list your comments, concerns, additions, or edits below. Please letter your responses to match the letter of the item(s) you checked (e.g. if you checked E above, type E- below then your suggestions). Write NA if you did not select any items above.

**Sub Component: Student Participation in Program**

Please review the descriptions that emerged from the last questionnaire round. Please check any statements that feel might require additions, edits, or clarification. You may also check items to voice concerns with their wording, meaning, or to merge items together. If you agree with all statements as they appear, please check NA.

- ☐ A. Students are relegated to menial tasks that do not reflect authentic participation in the occupation
- ☐ B. Lack of student choice in internship placement
- ☐ C. Students are advised away from internship/mentorship program
- ☐ D. Application process is disorganized
- ☐ E. Business partners refuse students for reasons other than behavior or safety concerns.
- ☐ F. Student are selected based on familial connections
- ☐ NA

For the items you checked above, please list your comments, concerns, additions, or edits below. Please letter your responses to match the letter of the item(s) you checked (e.g. if you checked E above, type E- below then your suggestions). Write NA if you did not select any items above.

**Sub Component: Mentors**

Please review the descriptions that emerged from the last questionnaire round. Please check any statements that feel might require additions, edits, or clarification. You may also check items to voice concerns with their wording, meaning, or to merge items together. If you agree with all statements as they appear, please check NA.

- ☐ A. Students do not receive support from their mentors
- ☐ B. Shortcomings of school or business discussed in front of student(s)
- ☐ C. Lack of communication between school and business level mentors
- ☐ NA

For the items you checked above, please list your comments, concerns, additions, or edits below. Please letter your responses to match the letter of the item(s) you checked (e.g. if you checked E above, type E- below then your suggestions). Write NA if you did not select any items above.

2. **Faculty Externships: IDEAL behaviors that teachers, school leaders, and business partners might exhibit to help establish the element.**

   *Business partners communicate current industry trends, demands, and expectations to schools through faculty externships with business partners*

**Sub Component: During Externship**

Please review the descriptions that emerged from the last questionnaire round. Please check any statements that feel might require additions, edits, or clarification. You may also check items to voice concerns with their wording, meaning, or to merge items together. If you agree with all statements as they appear, please check NA.

- ☐ A. Time to network with business partners.
- ☐ B. Look beyond obvious connections and see the more nuanced opportunities.
- ☐ C. Participants are willing and open to trying new things
- ☐ D. All stakeholders are engaged and participate with fidelity
- ☐ E. Mentors are involved in externships
- ☐ F. Interactions and language between all participants are courteous and complementary.
- ☐ G. Stakeholders identify skills and knowledge students need to thrive in a specific industry.
- ☐ H. School and business level participants openly share and learn from each other's experiences and knowledge.
- ☐ NA

For the items you checked above, please list your comments, concerns, additions, or edits below. Please letter your responses to match the letter of the item(s) you checked (e.g. if you checked E above, type E- below then your suggestions). Write NA if you did not select any items above.

**Sub Component: Planning and Preparation**

Please review the descriptions that emerged from the last questionnaire round. Please check any statements that feel might require additions, edits, or clarification. You may also check items to voice concerns with their wording, meaning, or to merge items together. If you agree with all statements as they appear, please check NA.

- ☐ C. Teacher needs and gaps are communicated to business partners and intermediaries
- ☐ D. Externships are aligned with career pathways offered by the school
- ☐ E. Outcomes for externship are clearly communicated to, and agreed upon by, all stakeholders
- ☐ F. Adequate time to conduct and debrief externships is imbedded in school calendar
- ☐ G. Timely response to student email
- ☐ NA

For the items you checked above, please list your comments, concerns, additions, or edits below. Please letter your responses to match the letter of the item(s) you checked (e.g. if you checked E above, type E- below then your suggestions). Write NA if you did not select any items above.

2. **Faculty Externships: UNACCEPTABLE behaviors that teachers, school leaders, and business partners might exhibit which would hinder establishment of the element.**

   *Business partners communicate current industry trends, demands, and expectations to schools through faculty externships with business partners*

**Sub Component: During Externship**

Please review the descriptions that emerged from the last questionnaire round. Please check any statements that feel might require additions, edits, or clarification. You may also check items to voice concerns with their wording, meaning, or to merge items together. If you agree with all statements as they appear, please check NA.

- ☐ A. Lack of commitment, interest, and participation
- ☐ B. Arrogance and non-compliance
- ☐ C. Mentors are not involved in externships
- ☐ D. Language directed toward discrediting each other
- ☐ E. Not building on the business relationship to create a mutually beneficial partnership.
- ☐ F. Unwilling to bring new practices or externship experiences to the classroom
- ☐ NA

For the items you checked above, please list your comments, concerns, additions, or edits below. Please letter your responses to match the letter of the item(s) you checked (e.g. if you checked E above, type E- below then your suggestions). Write NA if you did not select any items above.

**Sub Component: Planning and Preparation**

Please review the descriptions that emerged from the last questionnaire round. Please check any statements that feel might require additions, edits, or clarification. You may also check items to voice concerns with their wording, meaning, or to merge items together. If you agree with all statements as they appear, please check NA.

- ☐ A. Disorganized, lacking in transparency and communication
- ☐ B. School leadership does not foster buy-in to the purpose
- ☐ C. Expectation that business leaders organize and run externship
- ☐ D. Externships not connected to career pathways offered by the school
- ☐ NA

For the items you checked above, please list your comments, concerns, additions, or edits below. Please letter your responses to match the letter of the item(s) you checked (e.g. if you checked E above, type E- below then your suggestions). Write NA if you did not select any items above.

3. **Co-Created Career Themed Curriculum: IDEAL behaviors that teachers, school leaders, and business partners might exhibit to help establish the element.**

   *Students engage with a cross-curricular career/industry themed curriculum co-created by schools and business partners. The curriculum is problem/project-based, aligning with current industry and community needs.*

Please review the descriptions that emerged from the last questionnaire round. Please check any statements that feel might require additions, edits, or clarification. You may also check items to voice concerns with their wording, meaning, or to merge items together. If you agree with all statements as they appear, please check NA.

- ☐ A. Frequently schedule planning and collaboration meetings
- ☐ B. Time and resources provided to create curriculum and collaborate with business partners
- ☐ C. Facilitators are identified to keep the development process moving
- ☐ D. Stakeholders are: flexible, honest, and open-minded, willing to learn, and have an innovative mindset.
- ☐ E. Business partners identify specific industry expectations and soft skills to include in curriculum.
- ☐ F. Stakeholders are actively involved in and equally contribute to curriculum development
- ☐ NA

For the items you checked above, please list your comments, concerns, additions, or edits below. Please letter your responses to match the letter of the item(s) you checked (e.g. if you checked E above, type E- below then your suggestions). Write NA if you did not select any items above.

3. **Co-Created Career Themed Curriculum: UNACCEPTABLE behaviors that teachers, school leaders, and business partners might exhibit which would hinder establishment of the element.**

   *Students engage with a cross-curricular career/industry themed curriculum co-created by schools and business partners. The curriculum is problem/project-based, aligning with current industry and community needs.*

Please review the descriptions that emerged from the last questionnaire round. Please check any statements that feel might require additions, edits, or clarification. You may also check items to voice concerns with their wording, meaning, or to merge items together. If you agree with all statements as they appear, please check NA.

- ☐ A. One-sided communication of needs and agreements.
- ☐ B. Educators are rigid and unwilling to compromise or adjust curriculum to meet employer needs
- ☐ C. Disregard for building partnership as a means to benefit students
- ☐ D. Lack of communication and collaboration
- ☐ E. Curriculum is short-sighted, and lacks content integration
- ☐ F. Only focused on obvious connections and quick wins
- ☐ G. Stereotyping
- ☐ NA

For the items you checked above, please list your comments, concerns, additions, or edits below. Please letter your responses to match the letter of the item(s) you checked (e.g. if you checked E above, type E- below then your suggestions).

4. **Co-develop Employability Skills for Students: IDEAL behaviors that teachers, school leaders, and business partners might exhibit to help establish the element.**

   *School and business partners co-develop employability skills applicable to the academy's industry and ways to evaluate student performance with these skills.*

Please review the descriptions that emerged from the last questionnaire round. Please check any statements that feel might require additions, edits, or clarification. You may also check items to voice concerns with their wording, meaning, or to merge items together. If you agree with all statements as they appear, please check NA.

- ☐ A. Time and resources provided so teachers can co-develop employability skills with business partners
- ☐ B. Develop a structured system to gather and discuss input from all stakeholders
- ☐ C. Flexible and open-minded.
- ☐ D. Open communication and active collaboration between all groups
- ☐ E. Shared understanding of, and expectation for, implementing employability skills in schools
- ☐ F. Set expectations to a level that is appropriate for the industry to prepare students for post-secondary demands
- ☐ G. Align employability skills with content standards and General Learner Outcomes (GLOs)
- ☐ H. Developing realistic and measurable student results.
- ☐ I. Showing the mentors the right and acceptable way to be a professional
- ☐ NA

For the items you checked above, please list your comments, concerns, additions, or edits below. Please letter your responses to match the letter of the item(s) you checked (e.g. if you checked E above, type E- below then your suggestions).

4. **Co-develop Employability Skills for Students: UNACCEPTABLE behaviors that teachers, school leaders, and business partners might exhibit which would hinder establishment of the element.**

   *School and business partners co-develop employability skills applicable to the academy's industry and ways to evaluate student performance with these skills.*

Please review the descriptions that emerged from the last questionnaire round. Please check any statements that feel might require additions, edits, or clarification. You may also check items to voice concerns with their wording, meaning, or to merge items together. If you agree with all statements as they appear, please check NA.

- ☐ A. Lack of communication
- ☐ B. Schools do not incorporate suggestions from business partners
- ☐ C. Stakeholder groups do not align expectations and understanding of employability skills
- ☐ D. Selecting skills that do not align to a career
- ☐ E. Unwilling to make the time
- ☐ F. Not reinforcing employability skills in schools
- ☐ G. Lack of feedback to students for skills improvement
- ☐ H. Business partners not setting example for mentors of following employability skills
- ☐ NA

For the items you checked above, please list your comments, concerns, additions, or edits below. Please letter your responses to match the letter of the item(s) you checked (e.g. if you checked E above, type E- below then your suggestions).

5. **Work-Based Learning (WBL) Opportunities: IDEAL behaviors that teachers, school leaders, and business partners might exhibit to help establish the element.**

   *Schools and business partners provide work-based learning opportunities (guest speaking, judging student projects, mock interviews, etc.) that help students plan and execute their post-high school goals.*

Please review the descriptions that emerged from the last questionnaire round. Please check any statements that feel might require additions, edits, or clarification. You may also check items to voice concerns with their wording, meaning, or to merge items together. If you agree with all statements as they appear, please check NA.

- ☐ A. Collaborative effort where all stakeholders have a clear return on investment
- ☐ B. Collaborate to ensure students are prepared for participation in WBL opportunities
- ☐ C. Strong and consistent communication between stakeholder groups with scheduled meeting times
- ☐ D. Communicate ideas that contain social currency and are top of mind, deliver a feeling, visible, packaged easily, and wrapped into a compelling story.
- ☐ E. Schools and business partners select strong intermediaries to support the partnership structure
- ☐ F. Set clear expectations
- ☐ G. Consistent commitment
- ☐ H. Organized
- ☐ I. Enthusiasm in working with students
- ☐ J. Flexible timeline for allowing increased student participation
- ☐ K. Attention to DOE regulations for WBL site safety
- ☐ L. Volunteerism
- ☐ M. Partners are involved with mentors and mentors invite and involve their partners
- ☐ NA

For the items you checked above, please list your comments, concerns, additions, or edits below. Please letter your responses to match the letter of the item(s) you checked (e.g. if you checked E above, type E- below then your suggestions).

5. **Work-Based Learning (WBL) Opportunities: UNACCEPTABLE behaviors that teachers, school leaders, and business partners might exhibit which would hinder establishment of the element.**

   *Schools and business partners provide work-based learning opportunities (guest speaking, judging student projects, mock interviews, etc.) that help students plan and execute their post-high school goals.*

Please review the descriptions that emerged from the last questionnaire round. Please check any statements that feel might require additions, edits, or clarification. You may also check items to voice concerns with their wording, meaning, or to merge items together. If you agree with all statements as they appear, please check NA.

- ☐ A. Not using the experience to create a plan that will benefit students
- ☐ B. Not building on the business relationship to create a mutually beneficial partnership
- ☐ C. Facilitators are Boring, uninspiring or have negative attitude about their career
- ☐ D. Lack of organization
- ☐ E. Poor communication
- ☐ F. Not following up after a WBL opportunity is established/created.
- ☐ G. Not taking the time to prepare or support students for success with WBL opportunities.
- ☐ H. Allowing the students to not take WBL opportunities seriously.
- ☐ I. Importance of WBL opportunity is understated
- ☐ J. Setting goals/requirements of the opportunity to a level that excludes or overwhelms students
- ☐ K. Mentees and mentors avoid and do not invite each other
- ☐ L. Stakeholder groups do not support each other
- ☐ NA

For the items you checked above, please list your comments, concerns, additions, or edits below. Please letter your responses to match the letter of the item(s) you checked (e.g. if you checked E above, type E- below then your suggestions).

6. **Students Participate in Business Partner Sponsored Events: IDEAL behaviors that teachers, school leaders, and business partners might exhibit to help establish the element.**

   *Students are offered volunteer opportunities at business partner events (job fairs, beach clean-ups, family fairs, etc.).*

Please review the descriptions that emerged from the last questionnaire round. Please check any statements that feel might require additions, edits, or clarification. You may also check items to voice concerns with their wording, meaning, or to merge items together. If you agree with all statements as they appear, please check NA.

- ☐ A. Business partners present their information at a career day event.
- ☐ B. Business partners offer a sign in sheet to student participants and follow up with students
- ☐ C. Businesses are open to including minors in official events
- ☐ D. Lead by example through sincere participation in events
- ☐ E. Stakeholders collaborate to provide multiple, diverse volunteer experiences with businesses
- ☐ F. Mentors get involved in events and invite/include mentees
- ☐ G. Enthusiasm in working with students
- ☐ H. Communicate alignment between business partner events and future workforce goals to students.
- ☐ I. Establish clear guidelines, objectives, and expectations for students when interacting with adults
- ☐ J. Encourage students to participate in business partner events as a way to create more opportunities
- ☐ K. Before event, teachers share guest list with students and help them decide who to seek out at event.
- ☐ L. Teachers help shy students connect with business partners at events
- ☐ NA

For the items you checked above, please list your comments, concerns, additions, or edits below. Please letter your responses to match the letter of the item(s) you checked (e.g. if you checked E above, type E- below then your suggestions).

6. **Students Participate in Business Partner Sponsored Events: UNACCEPTABLE behaviors that teachers, school leaders, and business partners might exhibit which would hinder establishment of the element.**

   *Students are offered volunteer opportunities at business partner events (job fairs, beach clean-ups, family fairs, etc.).*

Please review the descriptions that emerged from the last questionnaire round. Please check any statements that feel might require additions, edits, or clarification. You may also check items to voice concerns with their wording, meaning, or to merge items together. If you agree with all statements as they appear, please check NA.

- ☐ A. Not assisting students with planning or preparation for event participation
- ☐ B. Not communicating these opportunities to students when they arise
- ☐ C. Lack of follow-through
- ☐ D. Not creating the connection between event opportunity and workforce needs.
- ☐ E. Not trying to plan and organize business partner events for student involvement
- ☐ F. Perfection over progress
- ☐ G. Mentors and Partners do not communicate or work together
- ☐ NA

For the items you checked above, please list your comments, concerns, additions, or edits below. Please letter your responses to match the letter of the item(s) you checked (e.g. if you checked E above, type E- below then your suggestions).

7. **Shared Vision: IDEAL behaviors that teachers, school leaders, and business partners might exhibit to help establish the element.**

   *Schools and business partners define outcomes, parameters, and purposes for the partnership.*

Please review the descriptions that emerged from the last questionnaire round. Please check any statements that feel might require additions, edits, or clarification. You may also check items to voice concerns with their wording, meaning, or to merge items together. If you agree with all statements as they appear, please check NA.

- ☐ A. Time and resources for teachers and industry partners to collaborate and establish a shared vision
- ☐ B. Establish regular meeting schedule with structured agenda
- ☐ C. Educators and the business partners should be very familiar with the vision and use it as a guiding light to focus on the important issues of the partnership.
- ☐ D. Willingness to learn about the whole school community
- ☐ E. Constructive criticism
- ☐ F. Ambition
- ☐ G. Buy-in and commitment to a common vision.
- ☐ H. Open and consistent communication between all groups
- ☐ I. Flexibility and willingness to compromise
- ☐ NA

For the items you checked above, please list your comments, concerns, additions, or edits below. Please letter your responses to match the letter of the item(s) you checked (e.g. if you checked E above, type E- below then your suggestions).

7. **Shared Vision: UNACCEPTABLE behaviors that teachers, school leaders, and business partners might exhibit which would hinder establishment of the element.**

   *Schools and business partners define outcomes, parameters, and purposes for the partnership.*

Please review the descriptions that emerged from the last questionnaire round. Please check any statements that feel might require additions, edits, or clarification. You may also check items to voice concerns with their wording, meaning, or to merge items together. If you agree with all statements as they appear, please check NA.

- ☐ A. Not willing to compromise or explore new options
- ☐ B. Lack of communication and collaboration
- ☐ C. Assumptions
- ☐ D. Narrow-minded scope
- ☐ E. Not knowing the vision
- ☐ F. Conducting teaching methods that ignore or disregard the vision.
- ☐ G. No effort to establish a shared vision
- ☐ H. Not using the experience to create a plan that will benefit students
- ☐ I. Not building on the business relationship to create a mutually beneficial partnership.
- ☐ NA

For the items you checked above, please list your comments, concerns, additions, or edits below. Please letter your responses to match the letter of the item(s) you checked (e.g. if you checked E above, type E- below then your suggestions).

8. **Academy Advisory Boards: IDEAL behaviors that teachers, school leaders, and business partners might exhibit to help establish the element.**

   *Stakeholders form advisory boards to develop or evolve career pathways that reflect current industry trends within the academy.*

Please review the descriptions that emerged from the last questionnaire round. Please check any statements that feel might require additions, edits, or clarification. You may also check items to voice concerns with their wording, meaning, or to merge items together. If you agree with all statements as they appear, please check NA.

- ☐ A. Time and resources to establish academy advisory boards through consistent and structured collaboration meetings
- ☐ B. Stakeholders willing to meet later in the day to fit work schedules
- ☐ C. Commitment in participation and follow through from participants
- ☐ D. Stakeholders willing to participate as board members
- ☐ E. Consistent board members
- ☐ F. Term limits to support rotating voices/new seats at the table
- ☐ G. Mentors help suggest and share industry trends and the best pathways to start and or take
- ☐ H. Creating strong relationships with business partners. Get involved with industry events when possible.
- ☐ I. Organization
- ☐ J. Enthusiasm in working with students
- ☐ NA

For the items you checked above, please list your comments, concerns, additions, or edits below. Please letter your responses to match the letter of the item(s) you checked (e.g. if you checked E above, type E- below then your suggestions).

8. **Academy Advisory Boards: UNACCEPTABLE behaviors that teachers, school leaders, and business partners might exhibit which would hinder establishment of the element.**

   *Stakeholders form advisory boards to develop or evolve career pathways that reflect current industry trends within the academy.*

Please review the descriptions that emerged from the last questionnaire round. Please check any statements that feel might require additions, edits, or clarification. You may also check items to voice concerns with their wording, meaning, or to merge items together. If you agree with all statements as they appear, please check NA.

- ☐ A. Lack of attendance and participation from stakeholders at planned meetings
- ☐ B. A lack of consistency
- ☐ C. Not using the experience to create a plan that will benefit students
- ☐ D. Not building on the business relationship to create a mutually beneficial partnership.
- ☐ E. Entitlement/disrespect
- ☐ F. Status quo
- ☐ G. No buy in from the industry
- ☐ H. Poor communication about purpose of meeting
- ☐ I. No follow up with stakeholders
- ☐ J. Mentors too busy to take time to work together
- ☐ K. Mentors not being involved and just too busy to be a mentor.
- ☐ NA

For the items you checked above, please list your comments, concerns, additions, or edits below. Please letter your responses to match the letter of the item(s) you checked (e.g. if you checked E above, type E- below then your suggestions).

## Phase 2 Round 3: Business Collaboration Behaviors

I am a Hawaiʻi career academy/CTE...
*Select one.*

- ☐ Teacher
- ☐ School Leader
- ☐ Business Partner

Please rank the statements according to your level of endorsement.

All those with an average ranking of moderately or strongly endorsed will progress to the next phase.

**1. Structured Student Internship/Mentorship Program: IDEAL behaviors that teachers, school leaders, and business partners might exhibit to help establish the element.**
*Schools and business partners collaborate to provide students with authentic experiences and training in career fields.*

**Sub Component: Collaboration**

IDEAL behaviors: All those with an average ranking of moderately or strongly endorsed will progress to the next phase

| | Statement: | I do not endorse this statement. | I minimally endorse this statement. | I moderately endorse this statement. | I strongly endorse this statement. |
|---|---|---|---|---|---|
| A. | Strong collaborative relationship between business partners and schools. | ☐ | ☐ | ☐ | ☐ |
| B. | Foster collaboration by defining a working relationship and trusting in each other's intent. | ☐ | ☐ | ☐ | ☐ |
| C. | Commitment to the decided plan whether or not in total agreement. They take accountability and follow through with identified responsibilities. | ☐ | ☐ | ☐ | ☐ |
| D. | Stakeholders collaborate to find internships that have long-term benefits for students: not just graduation requirement. | ☐ | ☐ | ☐ | ☐ |

**Sub Component: Communication**

IDEAL behaviors: All those with an average ranking of moderately or strongly endorsed will progress to the next phase.

| | Statement: | I do not endorse this statement. | I minimally endorse this statement. | I moderately endorse this statement. | I strongly endorse this statement. |
|---|---|---|---|---|---|
| A. | Student-centered discussions that focus on realistic expectations and outcomes for students. | ☐ | ☐ | ☐ | ☐ |
| B. | Create a common language and terminology. | ☐ | ☐ | ☐ | ☐ |
| C. | Regular and consistent communication between stakeholders. | ☐ | ☐ | ☐ | ☐ |
| D. | Open-minded discussions of all ideas and issues with room for respectful, constructive conflict. | ☐ | ☐ | ☐ | ☐ |

**Sub Component: Student Participation in Program**

IDEAL behaviors: All those with an average ranking of moderately or strongly endorsed will progress to the next phase

| Statement: | I do not endorse this statement. | I minimally endorse this statement. | I moderately endorse this statement. | I strongly endorse this statement. |
|---|---|---|---|---|
| A. The program has a flexible timeline increasing potential student participation. | ☐ | ☐ | ☐ | ☐ |
| B. Well organized application process to identify students for mentorship/internship program exists | ☐ | ☐ | ☐ | ☐ |
| C. Expectations for the program are clearly communicated | ☐ | ☐ | ☐ | ☐ |
| D. Students are allowed to apply to a specific mentorship/internship location | ☐ | ☐ | ☐ | ☐ |
| E. Require students to self-advocate demonstrating their dedication, responsibility, and endurance to complete a mentorship/internship assignment. | ☐ | ☐ | ☐ | ☐ |
| F. Safety of students is ensured by vetting potential mentors and internship locations | ☐ | ☐ | ☐ | ☐ |
| G. Program encourages students to become lifelong learners, innovators, and develop a growth mindset. | ☐ | ☐ | ☐ | ☐ |

**Sub Component: Mentors**

IDEAL behaviors: All those with an average ranking of moderately or strongly endorsed will progress to the next phase

| | Statement: | I do not endorse this statement. | I minimally endorse this statement. | I moderately endorse this statement. | I strongly endorse this statement. |
|---|---|---|---|---|---|
| A. | Discuss aspects of professionalism with students and model professionalism to students | ☐ | ☐ | ☐ | ☐ |
| B. | Scheduled timeline for meetings between student and their mentors (business and school level) | ☐ | ☐ | ☐ | ☐ |
| C. | Clearly defined roles and responsibilities for school and business level mentors. | ☐ | ☐ | ☐ | ☐ |
| D. | Mentorship program is structured and well organized | ☐ | ☐ | ☐ | ☐ |

**1. Structured Student Internship/Mentorship Program: UNACCEPTABLE behaviors that teachers, school leaders, and business partners might exhibit which would hinder establishment of the element.**
*Schools and business partners collaborate to provide students with authentic experiences and training in career fields.*

**Sub Component: Collaboration**

UNACCEPTABLE behaviors: All those with an average ranking of moderately or strongly endorsed will progress to the next phase

| Statement: | I do not endorse this statement. | I minimally endorse this statement. | I moderately endorse this statement. | I strongly endorse this statement. |
|---|---|---|---|---|
| A. Lack of commitment to a plan | ☐ | ☐ | ☐ | ☐ |
| B. Stakeholders are skeptical of each other's intent and induce toxic conflict. | ☐ | ☐ | ☐ | ☐ |
| C. Decisions are not student-centered | ☐ | ☐ | ☐ | ☐ |
| D. Unwilling to compromise | ☐ | ☐ | ☐ | ☐ |
| E. Students are asked to meet alone with unvetted adults. | ☐ | ☐ | ☐ | ☐ |

**Sub Component: Communication**

UNACCEPTABLE behaviors: All those with an average ranking of moderately or strongly endorsed will progress to the next phase.

| | Statement: | I do not endorse this statement. | I minimally endorse this statement. | I moderately endorse this statement. | I strongly endorse this statement. |
|---|---|---|---|---|---|
| A. | Lack of prompt, efficient, and open communication | ☐ | ☐ | ☐ | ☐ |
| B. | No communication about student growth or changes to student placement | ☐ | ☐ | ☐ | ☐ |
| C. | Arrangements for internship/mentorship is made without either business partner or schools knowledge or approval | ☐ | ☐ | ☐ | ☐ |
| D. | Retention of ideas and issues as a result of passive-aggressiveness. | ☐ | ☐ | ☐ | ☐ |

**Sub Component: Student Participation in Program**

UNACCEPTABLE behaviors: All those with an average ranking of moderately or strongly endorsed will progress to the next phase

| Statement: | I do not endorse this statement. | I minimally endorse this statement. | I moderately endorse this statement. | I strongly endorse this statement. |
|---|---|---|---|---|
| A. Students are relegated to menial tasks that do not reflect authentic participation in the occupation | ☐ | ☐ | ☐ | ☐ |
| B. Student does not get to choose the location of the internship | ☐ | ☐ | ☐ | ☐ |
| C. Placement is granted to meet a school requirement, not reflect student interest or college/career goals | ☐ | ☐ | ☐ | ☐ |
| D. Students are advised away from internship/mentorship program | ☐ | ☐ | ☐ | ☐ |
| E. Mentorship/internship application process is disorganized | ☐ | ☐ | ☐ | ☐ |
| F. Business partners refuse students for reasons other than behavior or safety concerns. | ☐ | ☐ | ☐ | ☐ |
| G. Student is selected for placement based on familial connections and politicking. | ☐ | ☐ | ☐ | ☐ |

**Sub Component: Mentors**

UNACCEPTABLE behaviors: All those with an average ranking of moderately or strongly endorsed will progress to the next phase

| Statement: | I do not endorse this statement. | I minimally endorse this statement. | I moderately endorse this statement. | I strongly endorse this statement. |
|---|---|---|---|---|
| A. Students do not receive support from their mentors | ☐ | ☐ | ☐ | ☐ |
| B. Shortcomings of school or business discussed in front of student(s) | ☐ | ☐ | ☐ | ☐ |
| C. Lack of communication between school and business level mentors | ☐ | ☐ | ☐ | ☐ |

**2. Faculty Externships: IDEAL behaviors that teachers, school leaders, and business partners might exhibit to help establish the element.**
*Business partners communicate current industry trends, demands, and expectations to schools through faculty externships with business partners*

**Sub Component: During Externship**

IDEAL behaviors: All those with an average ranking of moderately or strongly endorsed will progress to the next phase

| Statement: | I do not endorse this statement. | I minimally endorse this statement. | I moderately endorse this statement. | I strongly endorse this statement. |
|---|---|---|---|---|
| A. Stakeholders identify skills and knowledge students need to thrive in a specific industry. | ☐ | ☐ | ☐ | ☐ |
| B. School and business level participants openly share and learn from each other's experiences and knowledge | ☐ | ☐ | ☐ | ☐ |
| C. Participants are willing and open to trying new things | ☐ | ☐ | ☐ | ☐ |
| D. All stakeholders are engaged and participate with fidelity | ☐ | ☐ | ☐ | ☐ |
| E. Mentors are involved in externships | ☐ | ☐ | ☐ | ☐ |
| F. Interactions and language between all participants are courteous and complimentary. | ☐ | ☐ | ☐ | ☐ |
| G. Time to network with business partners is provided | ☐ | ☐ | ☐ | ☐ |
| H. Participants look beyond obvious connections and see the more nuanced opportunities | ☐ | ☐ | ☐ | ☐ |

**Sub Component: Planning and Preparation**

IDEAL behaviors: All those with an average ranking of moderately or strongly endorsed will progress to the next phase

| | Statement: | I do not endorse this statement. | I minimally endorse this statement. | I moderately endorse this statement. | I strongly endorse this statement. |
|---|---|---|---|---|---|
| A. | Teacher needs and gaps are communicated to business partners and intermediaries | ☐ | ☐ | ☐ | ☐ |
| B. | Externships are aligned with career pathways offered by the school | ☐ | ☐ | ☐ | ☐ |
| C. | Outcomes for externship are clearly communicated to, and agreed upon by, all stakeholders | ☐ | ☐ | ☐ | ☐ |
| D. | Adequate time to conduct and debrief externships is embedded in the school calendar | ☐ | ☐ | ☐ | ☐ |
| E. | Timely responses to student email | ☐ | ☐ | ☐ | ☐ |

**2. Faculty Externships: UNACCEPTABLE behaviors that teachers, school leaders, and business partners might exhibit which would hinder establishment of the element.**
*Business partners communicate current industry trends, demands, and expectations to schools through faculty externships with business partners*

**Sub Component: During Externship**

UNACCEPTABLE behaviors: All those with an average ranking of moderately or strongly endorsed will progress to the next phase

| Statement: | I do not endorse this statement. | I minimally endorse this statement. | I moderately endorse this statement. | I strongly endorse this statement. |
|---|---|---|---|---|
| A. Lack of commitment, interest, and participation by participants | ☐ | ☐ | ☐ | ☐ |
| B. Participants are arrogant and non-compliant | ☐ | ☐ | ☐ | ☐ |
| C. Mentors are not involved in externships | ☐ | ☐ | ☐ | ☐ |
| D. Language directed toward discrediting each other | ☐ | ☐ | ☐ | ☐ |
| E. Not building on the business relationship to create a mutually beneficial partnership. | ☐ | ☐ | ☐ | ☐ |
| F. Unwilling to bring new practices or externship experiences to the classroom | ☐ | ☐ | ☐ | ☐ |

**Sub Component: Planning and Preparation**

UNACCEPTABLE behaviors: All those with an average ranking of moderately or strongly endorsed will progress to the next phase

| Statement: | I do not endorse this statement. | I minimally endorse this statement. | I moderately endorse this statement. | I strongly endorse this statement. |
|---|---|---|---|---|
| A. Externship is disorganized, lacking in transparency and communication | ☐ | ☐ | ☐ | ☐ |
| B. School leadership does not foster buy-in to the purpose | ☐ | ☐ | ☐ | ☐ |
| C. There is an expectation that business leaders organize and run externship | ☐ | ☐ | ☐ | ☐ |
| D. Externships not connected to career pathways offered by the school | ☐ | ☐ | ☐ | ☐ |

**3. Co-Created Career Themed Curriculum: IDEAL behaviors that teachers, school leaders, and business partners might exhibit to help establish the element.**
*Co-Created Career Themed Curriculum: Students engage with cross-curricular, problem/project-based curriculum co-created by schools and business partners to align with current industry and community needs.*

| Statement: | I do not endorse this statement. | I minimally endorse this statement. | I moderately endorse this statement. | I strongly endorse this statement. |
|---|---|---|---|---|
| A. Frequently schedule planning and collaboration meetings | ☐ | ☐ | ☐ | ☐ |
| B. Time and resources provided to create curriculum and collaborate with business partners | ☐ | ☐ | ☐ | ☐ |
| C. Facilitators are identified to keep the development process moving | ☐ | ☐ | ☐ | ☐ |
| D. Stakeholders are: flexible, honest, and open-minded, willing to learn, and have an innovative mindset. | ☐ | ☐ | ☐ | ☐ |
| E. Business partners identify specific industry expectations and soft skills to include in the curriculum | ☐ | ☐ | ☐ | ☐ |
| F. Stakeholders are actively involved in and equally contribute to curriculum development | ☐ | ☐ | ☐ | ☐ |

**3. Co-Created Career Themed Curriculum: UNACCEPTABLE behaviors that teachers, school leaders, and business partners might exhibit which would hinder establishment of the element.**

*Co-Created Career Themed Curriculum: Students engage with cross-curricular, problem/project-based curriculum co-created by schools and business partners to align with current industry and community needs.*

| Statement: | I do not endorse this statement. | I minimally endorse this statement. | I moderately endorse this statement. | I strongly endorse this statement. |
|---|---|---|---|---|
| A. One-sided communication of needs and agreements by a single stakeholder group. | ☐ | ☐ | ☐ | ☐ |
| B. Educators are rigid and unwilling to compromise or adjust the curriculum to meet employer needs | ☐ | ☐ | ☐ | ☐ |
| C. Disregard for building partnership as a means to benefit students | ☐ | ☐ | ☐ | ☐ |
| D. Lack of communication and collaboration | ☐ | ☐ | ☐ | ☐ |
| E. Curriculum is short-sighted and lacks content integration | ☐ | ☐ | ☐ | ☐ |
| F. Only focused on obvious connections and quick wins | ☐ | ☐ | ☐ | ☐ |
| G. Stereotyping | ☐ | ☐ | ☐ | ☐ |

**4. Co-develop Employability Skills for Students: IDEAL behaviors that teachers, school leaders, and business partners might exhibit to help establish the element.**
*School and business partners co-develop employability skills applicable to the academy's industry and ways to evaluate student performance with these skills.*

| Statement: | I do not endorse this statement. | I minimally endorse this statement. | I moderately endorse this statement. | I strongly endorse this statement. |
|---|---|---|---|---|
| A. Time and resources provided so teachers can co-develop employability skills with business partners | ☐ | ☐ | ☐ | ☐ |
| B. Develop a structured system to gather and discuss input from all stakeholders | ☐ | ☐ | ☐ | ☐ |
| C. Stakeholders are flexible and open-minded. | ☐ | ☐ | ☐ | ☐ |
| D. Open communication and active collaboration between all groups | ☐ | ☐ | ☐ | ☐ |
| E. Shared understanding of, and expectation for, implementing employability skills in schools | ☐ | ☐ | ☐ | ☐ |
| F. Set expectations to a level that is appropriate for the industry to prepare students for post-secondary demands | ☐ | ☐ | ☐ | ☐ |
| G. Align employability skills with content standards and General Learner Outcomes (GLOs) | ☐ | ☐ | ☐ | ☐ |
| H. Developing realistic and measurable student results. | ☐ | ☐ | ☐ | ☐ |
| I. Showing the mentors the right and acceptable way to be a professional | ☐ | ☐ | ☐ | ☐ |

**4. Co-develop Employability Skills for Students: UNACCEPTABLE behaviors that teachers, school leaders, and business partners might exhibit which would hinder establishment of the element.**
*School and business partners co-develop employability skills applicable to the academy's industry and ways to evaluate student performance with these skills.*

| Statement: | I do not endorse this statement. | I minimally endorse this statement. | I moderately endorse this statement. | I strongly endorse this statement. |
|---|---|---|---|---|
| A. Stakeholders do not communicate and schools do not demonstrate the incorporations of suggestions from business partners. | ☐ | ☐ | ☐ | ☐ |
| B. Stakeholder groups do not align expectations and understanding of employability skills | ☐ | ☐ | ☐ | ☐ |
| C. Selecting skills that do not align with a career | ☐ | ☐ | ☐ | ☐ |
| D. Unwilling to make time to meet and form employability skills. | ☐ | ☐ | ☐ | ☐ |
| E. Not reinforcing employability skills in schools | ☐ | ☐ | ☐ | ☐ |
| F. Lack of feedback to students for skills improvement | ☐ | ☐ | ☐ | ☐ |
| G. Business partners not setting an example for mentors of following employability skills | ☐ | ☐ | ☐ | ☐ |

**5. Work-Based Learning (WBL) Opportunities: IDEAL behaviors that teachers, school leaders, and business partners might exhibit to help establish the element.**
*Schools and business partners provide work-based learning experiences (guest speaking, judging student projects, mock interviews, etc.) that help students plan and execute their post-high school goals.*

| Statement: | I do not endorse this statement. | I minimally endorse this statement. | I moderately endorse this statement. | I strongly endorse this statement. |
|---|---|---|---|---|
| A. Collaborative effort where all stakeholders have a clear return on investment | ☐ | ☐ | ☐ | ☐ |
| B. Collaborate to ensure students are prepared for participation in WBL opportunities | ☐ | ☐ | ☐ | ☐ |
| C. Strong and consistent communication between stakeholder groups with scheduled meeting times | ☐ | ☐ | ☐ | ☐ |
| D. Communicate ideas that contain social currency and are top of mind, deliver a feeling, visible, packaged easily, and wrapped into a compelling story. | ☐ | ☐ | ☐ | ☐ |
| E. Schools and business partners select strong intermediaries to support the partnership structure | ☐ | ☐ | ☐ | ☐ |
| F. WBL opportunities are organized and clear expectations are set for participants | ☐ | ☐ | ☐ | ☐ |
| G. Consistent commitment | ☐ | ☐ | ☐ | ☐ |
| H. Enthusiasm in working with students | ☐ | ☐ | ☐ | ☐ |
| I. Flexible timeline for allowing increased student participation | ☐ | ☐ | ☐ | ☐ |
| J. DOE regulation training on WBL site safety for all stakeholders | ☐ | ☐ | ☐ | ☐ |
| K. Partners are involved with mentors and mentors invite and involve their partners | ☐ | ☐ | ☐ | ☐ |
| L. Follow-up beyond the WBL opportunity. | ☐ | ☐ | ☐ | ☐ |

**5. Work-Based Learning (WBL) Opportunities: UNACCEPTABLE behaviors that teachers, school leaders, and business partners might exhibit which would hinder establishment of the element.**

*Schools and business partners provide work-based learning experiences (guest speaking, judging student projects, mock interviews, etc.) that help students plan and execute their post-high school goals.*

| Statement: | I do not endorse this statement. | I minimally endorse this statement. | I moderately endorse this statement. | I strongly endorse this statement. |
|---|---|---|---|---|
| A. Not using the experience to create a plan that will benefit students | ☐ | ☐ | ☐ | ☐ |
| B. Not building on the business relationship to create a mutually beneficial partnership | ☐ | ☐ | ☐ | ☐ |
| C. Facilitators lack passion, are uninspiring, or have a negative attitude about their career | ☐ | ☐ | ☐ | ☐ |
| D. WBL opportunities are disorganized and there is poor communication between facilitators | ☐ | ☐ | ☐ | ☐ |
| E. There is no follow-up after a WBL opportunity is established/created. | ☐ | ☐ | ☐ | ☐ |
| F. No time is allocated to prepare or support students for success with WBL opportunities. | ☐ | ☐ | ☐ | ☐ |
| G. Allowing the students to not take WBL opportunities seriously. | ☐ | ☐ | ☐ | ☐ |
| H. Importance of WBL opportunity is understated | ☐ | ☐ | ☐ | ☐ |
| I. Setting goals/requirements of the opportunity to a level that excludes or overwhelms students | ☐ | ☐ | ☐ | ☐ |
| J. Mentees and mentors avoid and do not invite each other | ☐ | ☐ | ☐ | ☐ |
| K. Stakeholder groups do not support each other | ☐ | ☐ | ☐ | ☐ |

**6. Students Participate in Business Partner Sponsored Events: IDEAL behaviors that teachers, school leaders, and business partners might exhibit to help establish the element.**

*Students are offered volunteer opportunities at business partner events (job fairs, beach clean-ups, family fairs, etc.).*

| Statement: | I do not endorse this statement. | I minimally endorse this statement. | I moderately endorse this statement. | I strongly endorse this statement. |
|---|---|---|---|---|
| A. Business partners present their information at a career day event. | ☐ | ☐ | ☐ | ☐ |
| B. Business partners offer a sign-in sheet to student participants and follow up with students | ☐ | ☐ | ☐ | ☐ |
| C. Businesses are open to including minors in official events | ☐ | ☐ | ☐ | ☐ |
| D. Lead by example through sincere participation in events | ☐ | ☐ | ☐ | ☐ |
| E. Stakeholders collaborate to provide multiple, diverse volunteer experiences with businesses | ☐ | ☐ | ☐ | ☐ |
| F. Mentors get involved in events and invite/include mentees | ☐ | ☐ | ☐ | ☐ |
| G. Enthusiasm in working with students | ☐ | ☐ | ☐ | ☐ |
| H. The alignment between business partner events and future workforce goals is communicated to students. | ☐ | ☐ | ☐ | ☐ |
| I. Establish clear guidelines, objectives, and expectations for students when interacting with adults | ☐ | ☐ | ☐ | ☐ |
| J. Encourage students to participate in business partner events as a way to create more opportunities | ☐ | ☐ | ☐ | ☐ |

| | | | | |
|---|---|---|---|---|
| K. Before an event, teachers share guest list with students and help them decide who to seek out at the event. | ☐ | ☐ | ☐ | ☐ |
| L. Shy students are prepared prior to an event with strategies that will help them rise above their comfort zone and connect with business partners at events | ☐ | ☐ | ☐ | ☐ |

**6. Students Participate in Business Partner Sponsored Events: UNACCEPTABLE behaviors that teachers, school leaders, and business partners might exhibit which would hinder establishment of the element.**
*Students are offered volunteer opportunities at business partner events (job fairs, beach clean-ups, family fairs, etc.).*

| Statement: | I do not endorse this statement. | I minimally endorse this statement. | I moderately endorse this statement. | I strongly endorse this statement. |
|---|---|---|---|---|
| A. No assistance, planning, or preparation is provided to students prior to event participation. | ☐ | ☐ | ☐ | ☐ |
| B. Business partner event opportunities are not communicated to students | ☐ | ☐ | ☐ | ☐ |
| C. There is a lack of follow-through after the event | ☐ | ☐ | ☐ | ☐ |
| D. Stakeholders do not communicate the connection between the event and workforce needs | ☐ | ☐ | ☐ | ☐ |
| E. Not trying to plan and organize business partner events for student involvement | ☐ | ☐ | ☐ | ☐ |
| F. Value is placed on perfection in student performance over progress | ☐ | ☐ | ☐ | ☐ |
| G. Mentors and Partners do not communicate or work together | ☐ | ☐ | ☐ | ☐ |

**7. Shared Vision for Partnership: IDEAL behaviors that teachers, school leaders, and business partners might exhibit to help establish the element.**
*Schools and business partners define outcomes, parameters, and purposes for the partnership.*

| Statement: | I do not endorse this statement. | I minimally endorse this statement. | I moderately endorse this statement. | I strongly endorse this statement. |
|---|---|---|---|---|
| A. Time and resources are provided for teachers and industry partners to collaborate and establish a shared vision | ☐ | ☐ | ☐ | ☐ |
| B. A regular meeting schedule with structured agendas is established | ☐ | ☐ | ☐ | ☐ |
| C. Educators and business partners are very familiar with the vision and use it as a guiding light to focus on the important issues of the partnership. | ☐ | ☐ | ☐ | ☐ |
| D. There is buy-in and commitment to a common vision. | ☐ | ☐ | ☐ | ☐ |
| E. Stakeholders are willing to learn about the whole school community | ☐ | ☐ | ☐ | ☐ |
| F. Open and consistent communication between all groups | ☐ | ☐ | ☐ | ☐ |
| G. Flexibility and willingness to compromise | ☐ | ☐ | ☐ | ☐ |
| H. Constructive criticism | ☐ | ☐ | ☐ | ☐ |
| I. Ambition | ☐ | ☐ | ☐ | ☐ |

**7. Shared Vision Partnership: UNACCEPTABLE behaviors that teachers, school leaders, and business partners might exhibit which would hinder establishment of the element.**
*Schools and business partners define outcomes, parameters, and purposes for the partnership.*

| Statement: | I do not endorse this statement. | I minimally endorse this statement. | I moderately endorse this statement. | I strongly endorse this statement. |
|---|---|---|---|---|
| A. Not willing to compromise or explore new options | ☐ | ☐ | ☐ | ☐ |
| B. Lack of communication and collaboration | ☐ | ☐ | ☐ | ☐ |
| C. Narrow-minded scope | ☐ | ☐ | ☐ | ☐ |
| D. Stakeholders not knowing the vision | ☐ | ☐ | ☐ | ☐ |
| E. Conducting teaching methods that ignore or disregard the vision. | ☐ | ☐ | ☐ | ☐ |
| F. No effort to establish a shared vision | ☐ | ☐ | ☐ | ☐ |
| G. Not using the experience to create a plan that will benefit students | ☐ | ☐ | ☐ | ☐ |
| H. Stakeholders do not build on the business relationship to create a mutually beneficial partnership. | ☐ | ☐ | ☐ | ☐ |
| I. Assumptions | ☐ | ☐ | ☐ | ☐ |

**8. Academy Advisory Boards: IDEAL behaviors that teachers, school leaders, and business partners might exhibit to help establish the element.**
*Stakeholders form advisory boards to develop or evolve aspects of the academy to reflect current industry trends.*

| Statement: | I do not endorse this statement. | I minimally endorse this statement. | I moderately endorse this statement. | I strongly endorse this statement. |
|---|---|---|---|---|
| A. Time and resources to establish academy advisory boards through consistent and structured collaboration meetings are provided | ☐ | ☐ | ☐ | ☐ |
| B. Stakeholders are willing to meet later in the day to fit work schedules | ☐ | ☐ | ☐ | ☐ |
| C. Commitment to participation and follow-through from participants | ☐ | ☐ | ☐ | ☐ |
| D. Stakeholders are willing to participate as board members | ☐ | ☐ | ☐ | ☐ |
| E. Consistent board members | ☐ | ☐ | ☐ | ☐ |
| F. Term limits to support rotating voices/new seats at the table | ☐ | ☐ | ☐ | ☐ |
| G. Mentors help suggest and share industry trends and the best pathways to start and or take | ☐ | ☐ | ☐ | ☐ |
| H. Creating strong relationships with business partners. Get involved with industry events when possible. | ☐ | ☐ | ☐ | ☐ |
| I. Organization | ☐ | ☐ | ☐ | ☐ |
| J. Stakeholders show enthusiasm when working with students | ☐ | ☐ | ☐ | ☐ |

**8. Academy Advisory Boards: UNACCEPTABLE behaviors that teachers, school leaders, and business partners might exhibit which would hinder establishment of the element.**

*Stakeholders form advisory boards to develop or evolve aspects of the academy to reflect current industry trends.*

| Statement: | I do not endorse this statement. | I minimally endorse this statement. | I moderately endorse this statement. | I strongly endorse this statement. |
|---|---|---|---|---|
| A. Lack of attendance and participation from stakeholders at planned meetings | ☐ | ☐ | ☐ | ☐ |
| B. Not using the experience to create a plan that will benefit students | ☐ | ☐ | ☐ | ☐ |
| C. Not building on the business relationship to create a mutually beneficial partnership. | ☐ | ☐ | ☐ | ☐ |
| D. No buy-in from the industry | ☐ | ☐ | ☐ | ☐ |
| E. Poor communication about purpose of meeting | ☐ | ☐ | ☐ | ☐ |
| F. No follow up with stakeholders | ☐ | ☐ | ☐ | ☐ |
| G. Members too busy to take time to work together | ☐ | ☐ | ☐ | ☐ |
| H. Members not being involved and too busy to be a participant. | ☐ | ☐ | ☐ | ☐ |
| I. Entitlement/disrespect | ☐ | ☐ | ☐ | ☐ |
| J. Status quo | ☐ | ☐ | ☐ | ☐ |

**Phase 3: Round 1: Business Collaboration Behaviors**

I am a Hawai‘i career academy/CTE...
*Select one.*

☐ Teacher
☐ School Leader
☐ Business Partner
☐ Resubmitting Responses (see clarification email for details!)

In this round, we will work toward completing the implementation guide by listing acceptable behaviors (not ideal, but not unacceptable) that school leaders, business partners, and teachers might exhibit to help establish business collaborations in Hawai‘i’s career academies.

Do NOT respond 'same as ideal behaviors' for the acceptable behaviors responses please! (See clarification email for details and rationale)

1. Structured Student Internship/Mentorship Program: Schools and business partners collaborate to provide students with authentic experiences and training in career fields.

**Sub Component: Collaboration**

| **1. Structured Student Internship/Mentorship Program:** Schools and business partners collaborate to provide students with authentic experiences and training in career fields. | | | |
|---|---|---|---|
| **Sub Component:** | **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| **Collaboration** | Strong collaborative relationships between business partners and schools are fostered by defining a working relationship and trust in each other's intent.<br><br>Stakeholders are committed to the decided plan whether or not they are in total consensus. They take accountability and follow through with their identified responsibilities. | | Stakeholders are unwilling to compromise and lack commitment to a plan.<br><br>Stakeholders are skeptical of each other's intent and induce toxic conflict. |

What might be acceptable behaviors (not ideal, but not unacceptable) that teachers, school leaders, and business partners might exhibit that could help establish the collaboration component of the Structured Student Internship/Mentorship Program element?

Do you have any suggestions for additions, edits, or deletions from the ideal and unacceptable behaviors table above? Please be very specific with any suggestions.

**Sub Component: Communication**

| **1. Structured Student Internship/Mentorship Program:** Schools and business partners collaborate to provide students with authentic experiences and training in career fields. | | | |
|---|---|---|---|
| **Sub Component:** | **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| **Communication** | There is regular and consistent communication between stakeholders.<br><br>A common language and terminology are created to foster communication.<br><br>Open-minded discussions of all ideas and issues occur with room for respectful, constructive conflict.<br><br>Discussions are student-centered focusing on realistic expectations and outcomes for students. | | There is a lack of prompt, efficient, and open communication.<br><br>No communication about student growth or changes to student placement in the program occurs.<br><br>Retention of ideas and issues occurs as a result of passive-aggressiveness.<br><br>Arrangements for internships/mentorships are made without either business partner or school knowledge/approval.<br><br>Decisions are made that are not student-centered. |

What might be acceptable behaviors (not ideal, but not unacceptable) that teachers, school leaders, and business partners might exhibit that could help establish the communication component of the Structured Student Internship/Mentorship Program element?

Do you have any suggestions for additions, edits, or deletions from the ideal and unacceptable behaviors table above? Please be very specific with any suggestions.

**Sub Component: Application Process**

| **1. Structured Student Internship/Mentorship Program:** Schools and business partners collaborate to provide students with authentic experiences and training in career fields. | | | |
|---|---|---|---|
| **Sub Component:** | **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| **Application Process** | A well-organized application process to identify students for mentorship/internship programs exists.<br><br>Expectations for the program are clearly communicated and students are allowed to apply to a specific mentorship/internship location<br><br>Students are required to self-advocate demonstrating their dedication, responsibility, and endurance to complete a mentorship/internship assignment. | | The application process is disorganized. |

What might be acceptable behaviors (not ideal, but not unacceptable) that teachers, school leaders, and business partners might exhibit that could help establish the Application Process of the Structured Student Internship/Mentorship Program element?

Do you have any suggestions for additions, edits, or deletions from the ideal and unacceptable behaviors table above? Please be very specific with any suggestions.

**Sub Component: Student Participation in Program**

| **1. Structured Student Internship/Mentorship Program:** Schools and business partners collaborate to provide students with authentic experiences and training in career fields. | | | |
|---|---|---|---|
| **Sub Component:** | **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| **Student Participation in Program** | The program has a flexible timeline increasing potential student participation.<br><br>The program encourages students to become lifelong learners, innovators, and develop a growth mindset.<br><br>Student safety is ensured by vetting potential mentors and internship locations.<br><br>Stakeholders collaborate to find internships that have long-term benefits for students. Program participation exceeds graduation requirements. | | Students are advised away from the internship/mentorship program.<br><br>Placement in the program is granted to meet a school requirement and does not reflect student interest or college/career goals<br><br>Students are asked to meet alone with unvetted adults.<br><br>Students are relegated to menial tasks that do not reflect authentic participation in the occupation |

What might be acceptable behaviors (not ideal, but not unacceptable) that teachers, school leaders, and business partners might exhibit that could help establish the Student Participation in Program component of the Structured Student Internship/Mentorship Program element?

Do you have any suggestions for additions, edits, or deletions from the ideal and unacceptable behaviors table above? Please be very specific with any suggestions.

**Sub Component: Mentors**

| **1. Structured Student Internship/Mentorship Program:** Schools and business partners collaborate to provide students with authentic experiences and training in career fields. | | | |
|---|---|---|---|
| **Sub Component:** | **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| **Mentors** | The mentorship program is structured and well organized.<br><br>A scheduled timeline for meetings between students and their mentors (business and school level) is established.<br><br>Mentors discuss aspects of professionalism with students and model professionalism to students.<br><br>School and business level mentors have clearly defined roles and responsibilities. | | Students do not receive support from their mentors.<br><br>There is a lack of communication between school and business level mentors.<br><br>The shortcomings of the school or business are discussed in front of student(s) |

What might be acceptable behaviors (not ideal, but not unacceptable) that teachers, school leaders, and business partners might exhibit that could help establish the Mentors component of the Structured Student Internship/Mentorship Program element?

Do you have any suggestions for additions, edits, or deletions from the ideal and unacceptable behaviors table above? Please be very specific with any suggestions.

2. Faculty Externships:
Business partners communicate current industry trends, demands, and expectations to schools through faculty externships with business partners

**Sub Component: During Externship**

| **2. Faculty Externships:** Business partners communicate current industry trends, demands, and expectations to schools through faculty externships with business partners | | | |
|---|---|---|---|
| **Sub Component:** | **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| **During Externship** | Stakeholders identify skills and knowledge students need to thrive in a specific industry openly sharing and learning from each other's experiences and knowledge.<br><br>Participants look beyond obvious connections and see more nuanced opportunities.<br><br>Time to network with business partners is provided<br><br>All stakeholders are engaged, participate with fidelity, and are willing and open to trying new things.<br><br>The interactions and language between all participants are courteous and complimentary.<br><br>Mentors are involved in externships | | Unwilling to bring new practices or externship experiences to the classroom.<br><br>Not building on the business relationship to create a mutually beneficial partnership.<br><br>Participants lack commitment, interest, and participation. They are arrogant, non-compliant, and use language that is directed toward discrediting each other.<br><br>Mentors are not involved in externships |

What might be acceptable behaviors (not ideal, but not unacceptable) that teachers, school leaders, and business partners might exhibit that could help establish the During Externship component of the Faculty Externships element?

Do you have any suggestions for additions, edits, or deletions from the ideal and unacceptable behaviors table above? Please be very specific with any suggestions.

**Sub Component: Planning and Preparation**

| **2. Faculty Externships:** Business partners communicate current industry trends, demands, and expectations to schools through faculty externships with business partners | | | |
|---|---|---|---|
| **Sub Component:** | **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| **Planning and Preparation** | Outcomes for externship are clearly communicated to, and agreed upon by, all stakeholders.<br><br>Teacher needs and gaps are communicated to business partners and intermediaries.<br><br>Adequate time to conduct and debrief externships is embedded in the school calendar<br><br>Externships are aligned with career pathways offered by the school | | School leadership does not foster buy-in to the purpose of faculty externships.<br><br>The externship is disorganized, lacking in transparency and communication.<br><br>Externships are not connected to career pathways offered by the school |

What might be acceptable behaviors (not ideal, but not unacceptable) that teachers, school leaders, and business partners might exhibit that could help establish the Planning and Preparation component of the Faculty Externships element?

Do you have any suggestions for additions, edits, or deletions from the ideal and unacceptable behaviors table above? Please be very specific with any suggestions.

3. Co-Created Career Themed Curriculum: Students engage with a cross-curricular career/industry themed curriculum co-created by schools and business partners. The curriculum is problem/project-based and aligned with current industry and community needs as well as academic standards.

**Sub Component: Planning and Collaboration**

| **3. Co-Created Career Themed Curriculum:** Students engage with a cross-curricular career/industry themed curriculum co-created by schools and business partners. The curriculum is problem/project-based and aligned with current industry and community needs as well as academic standards. | | | |
|---|---|---|---|
| **Sub Component:** | **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| **Planning and Collaboration** | Time and resources are provided to create a curriculum and collaborate with business partners.<br><br>Planning and collaboration meetings are frequently scheduled.<br><br>Facilitators are identified to keep the development process moving.<br><br>Stakeholders are flexible, honest, and open-minded, willing to learn, and have an innovative mindset. | | There is a lack of communication, collaboration, and a disregard for building partnership as a means to benefit students.<br><br>Communication that does occur is a one-sided conveyance of a single stakeholder group's needs and agreements.<br><br>The curriculum is short-sighted, and lacks content integration. It focuses on obvious connections, stereotypes, and quick wins. |

What might be acceptable behaviors (not ideal, but not unacceptable) that teachers, school leaders, and business partners might exhibit that could help establish the Planning and Collaboration component of the Co-Created Career Themed Curriculum element?

Do you have any suggestions for additions, edits, or deletions from the ideal and unacceptable behaviors table above? Please be very specific with any suggestions.

**Sub Component: Stakeholder Contributions**

| **3. Co-Created Career Themed Curriculum:** Students engage with a cross-curricular career/industry themed curriculum co-created by schools and business partners. The curriculum is problem/project-based and aligned with current industry and community needs as well as academic standards. | | | |
|---|---|---|---|
| **Sub Component:** | **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| **Stakeholder Contributions** | All stakeholders are actively involved in and equally contribute to curriculum development.<br><br>Business partners identify specific industry expectations and soft skills to include in the curriculum | | Educators are rigid and unwilling to compromise or adjust the curriculum to meet employer needs. |

What might be acceptable behaviors (not ideal, but not unacceptable) that teachers, school leaders, and business partners might exhibit that could help establish the Stakeholder Contributions component of the Co-Created Career Themed Curriculum element?

Do you have any suggestions for additions, edits, or deletions from the ideal and unacceptable behaviors table above? Please be very specific with any suggestions.

4. Co-develop Employability Skills for Students: School and business partners co-develop employability skills applicable to the academy's industry and ways to evaluate student performance with these skills.

**Sub Component: Collaboration and Communication**

| **4. Co-develop Employability Skills for Students:** School and business partners co-develop employability skills applicable to the academy's industry and ways to evaluate student performance with these skills. | | | |
|---|---|---|---|
| **Sub Component:** | **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| **Collaboration and communication** | Time and resources are provided so teachers can co-develop employability skills with business partners.<br><br>A structured system to gather and discuss input from all stakeholders is developed.<br><br>Stakeholders are flexible and open-minded with open communication and active collaboration between all groups. | | Stakeholders do not communicate and are unwilling to make time to meet and develop employability skills.<br><br>Schools do not incorporate suggestions from business partners. |

What might be acceptable behaviors (not ideal, but not unacceptable) that teachers, school leaders, and business partners might exhibit that could help establish the Collaboration and Communication component of the Co-develop Employability Skills for Students element?

Do you have any suggestions for additions, edits, or deletions from the ideal and unacceptable behaviors table above? Please be very specific with any suggestions.

**Sub Component: Development and Implementation**

| **4. Co-develop Employability Skills for Students:** School and business partners co-develop employability skills applicable to the academy's industry and ways to evaluate student performance with these skills. | | | |
|---|---|---|---|
| **Sub Component:** | **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| **Development and Implementation** | Stakeholders share an understanding of, and expectation for, implementing employability skills in schools.<br><br>Realistic and measurable student results are developed.<br><br>Employability skill expectations are set to a level that is appropriate for the industry to prepare students for post-secondary demands.<br><br>The employability skills align with content standards and General Learner Outcomes (GLOs)<br><br>Employability skills are used to show mentors the right and acceptable way to be a professional. | | Stakeholder groups do not align expectations and understanding of employability skills. The skills are not reinforced in schools.<br><br>Students do not receive feedback for skills improvement.<br><br>Skills are selected that do not align with a career.<br><br>Business partners do not set an example for mentors of following employability skills |

What might be acceptable behaviors (not ideal, but not unacceptable) that teachers, school leaders, and business partners might exhibit that could help establish the Alignment and Expectations component of the Co-develop Employability Skills for Students element?

Do you have any suggestions for additions, edits, or deletions from the ideal and unacceptable behaviors table above? Please be very specific with any suggestions.

5. Work-Based Learning (WBL) Opportunities: Schools and business partners collaborate to provide work-based experiences (guest speaking, capstone courses, mock interviews, etc.) that help students plan and execute their post-high school goals.

**Sub Component: WBL Opportunity Development**

| **5. Work-Based Learning Opportunities (WBL):** Schools and business partners collaborate to provide work-based experiences (guest speaking, capstone courses, mock interviews, etc.) that help students plan and execute their post-high school goals. | | | |
|---|---|---|---|
| **Sub Component:** | **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| **WBL Opportunity Development** | The WBL opportunities communicate ideas that contain social currency and are visible, top of mind, deliver a feeling, package easily, and are wrapped into a compelling story.<br><br>They are organized with clear expectations for participants and a flexible timeline allowing increased student participation.<br><br>Planned follow-up beyond the WBL opportunity occurs. | | WBL opportunities are disorganized and there is poor communication between facilitators.<br><br>There is no follow-up after a WBL opportunity is established/created. |

What might be acceptable behaviors (not ideal, but not unacceptable) that teachers, school leaders, and business partners might exhibit that could help establish the WBL Opportunity Development component of the Work-Based Learning (WBL) Opportunities element?

Do you have any suggestions for additions, edits, or deletions from the ideal and unacceptable behaviors table above? Please be very specific with any suggestions.

**Sub Component: Stakeholder Involvement**

| **5. Work-Based Learning Opportunities (WBL):** Schools and business partners collaborate to provide work-based experiences (guest speaking, capstone courses, mock interviews, etc.) that help students plan and execute their post-high school goals. | | | |
|---|---|---|---|
| **Sub Component:** | **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| **Stakeholder Involvement** | The WBL opportunity is a collaborative effort where all stakeholders have a clear return on investment.<br><br>Schools and business partners select strong intermediaries to support the partnership structure.<br><br>Partners are involved with mentors and mentors invite and involve their partners | | Stakeholder groups do not support each other. The goals/requirements of the opportunity are set to a level that excludes or overwhelms students.<br><br>Stakeholders do not use the WBL experience to create a plan that will benefit students. Not building on the business relationship to create a mutually beneficial partnership<br><br>Mentees and mentors avoid and do not invite each other |

What might be acceptable behaviors (not ideal, but not unacceptable) that teachers, school leaders, and business partners might exhibit that could help establish the Stakeholder Involvement component of the Work-Based Learning (WBL) Opportunities element?

Do you have any suggestions for additions, edits, or deletions from the ideal and unacceptable behaviors table above? Please be very specific with any suggestions.

**Sub Component: Student Interactions**

| **5. Work-Based Learning Opportunities (WBL):** Schools and business partners collaborate to provide work-based experiences (guest speaking, capstone courses, mock interviews, etc.) that help students plan and execute their post-high school goals. | | | |
|---|---|---|---|
| **Sub Component:** | **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| **Student Interactions** | Stakeholders show enthusiasm in working with students. They have strong and consistent; communication, commitment, and scheduled meeting times.<br><br>All stakeholders receive DOE regulation training on WBL site safety and collaborate to ensure students are prepared for participation in the opportunities. | | Facilitators lack passion, are uninspiring, or have a negative attitude about their career<br><br>No time is allocated to prepare or support students for success with WBL opportunities.<br><br>Students are allowed to not take WBL opportunities seriously. The importance of WBL opportunity is understated. |

What might be acceptable behaviors (not ideal, but not unacceptable) that teachers, school leaders, and business partners might exhibit that could help establish the Student Interactions component of the Work-Based Learning (WBL) Opportunities element?

Do you have any suggestions for additions, edits, or deletions from the ideal and unacceptable behaviors table above? Please be very specific with any suggestions.

6. Students participate in business partner events: Students are offered service or volunteer opportunities at business partner events (job fairs, beach clean-ups, family fairs, etc.).

**Sub Component: Stakeholder Roles**

| **6. Students participate in business partner events:** Students are offered service or volunteer opportunities at business partner events (job fairs, beach clean-ups, family fairs, etc.). | | | |
|---|---|---|---|
| **Sub Component:** | **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| **Stakeholder Roles** | Stakeholders collaborate to provide multiple, diverse volunteer experiences with businesses.<br><br>Business partners present their information at a career day event.<br><br>Business partners offer a sign-in sheet to student participants and follow up with students<br><br>Businesses are open to including minors in official events.<br><br>Stakeholders lead by example through sincere participation in events and show enthusiasm when working with students.<br><br>Mentors get involved in events and invite/include mentees | | No attempt to plan and organize business partner events for student involvement.<br><br>Stakeholders do not communicate the connection between the event and workforce needs<br><br>There is a lack of follow-through after the event.<br><br>Mentors and Partners do not communicate or work together |

What might be acceptable behaviors (not ideal, but not unacceptable) that teachers, school leaders, and business partners might exhibit that could help establish the Stakeholder Roles component of the Students Participate in Business Partner Sponsored Events element?

Do you have any suggestions for additions, edits, or deletions from the ideal and unacceptable behaviors table above? Please be very specific with any suggestions.

**Sub Component: Preparing Students**

| **6. Students participate in business partner events:** Students are offered service or volunteer opportunities at business partner events (job fairs, beach clean-ups, family fairs, etc.). | | | |
|---|---|---|---|
| **Sub Component:** | **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| **Preparing Students** | Clear adult interaction guidelines, objectives, and expectations are established for students.<br><br>Before an event, teachers share guest lists with students and help them decide who to seek out at the event.<br><br>Shy students are prepared prior to an event with strategies that will help them rise above their comfort zone and connect with individuals at events<br><br>Encourage students to participate in business partner events as a way to create more opportunities<br><br>The alignment between business partner events and future workforce goals is communicated to students | | No assistance, planning, or preparation is provided to students prior to event participation.<br><br>Business partner event opportunities are not communicated to students.<br><br>Value is placed on perfection in student performance over progress. |

What might be acceptable behaviors (not ideal, but not unacceptable) that teachers, school leaders, and business partners might exhibit that could help establish the Preparing Students component of the Students Participate in Business Partner Sponsored Events element?

Do you have any suggestions for additions, edits, or deletions from the ideal and unacceptable behaviors table above? Please be very specific with any suggestions.

7. Shared Vision for Partnership: Schools and business partners define outcomes, parameters, and purposes for the partnership.

**Sub Component: Establishing Vision**

| **7. Shared Vision for Partnership:** Schools and business partners define outcomes, parameters, and purposes for the partnership. | | | |
|---|---|---|---|
| **Sub Component:** | **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| **Establishing Vision** | Teachers and industry partners are provided with time and resources to collaborate and establish a shared vision.<br><br>Educators and business partners are very familiar with the vision and use it as a guiding light to focus on the important issues of the partnership.<br><br>There is buy-in and commitment to a common vision.<br><br>Stakeholders are willing to learn about the whole school community | | There is little to no effort given to establishing a shared vision or stakeholders do not know the vision.<br><br>Educators conduct teaching methods that ignore or disregard the vision.<br><br>Stakeholders make assumptions. |

What might be acceptable behaviors (not ideal, but not unacceptable) that teachers, school leaders, and business partners might exhibit that could help establish the Preparing Students component of the Students Participate in Business Partner Sponsored Events element?

Do you have any suggestions for additions, edits, or deletions from the ideal and unacceptable behaviors table above? Please be very specific with any suggestions.

**Sub Component: Communication**

| **7. Shared Vision for Partnership:** Schools and business partners define outcomes, parameters, and purposes for the partnership. | | | |
|---|---|---|---|
| **Sub Component:** | **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| **Communication** | A regular meeting schedule with structured agendas is established.<br><br>There is open and consistent communication between all groups, allowing for constructive criticism.<br><br>Stakeholders are flexible and willing to compromise. | | There is a lack of communication and collaboration.<br><br>Stakeholders are not willing to compromise, explore new options, and are narrow-minded in scope.<br><br>Stakeholders do not build on the business relationship to create a mutually beneficial partnership, nor do they use the experience to create a plan that will benefit students. |

What might be acceptable behaviors (not ideal, but not unacceptable) that teachers, school leaders, and business partners might exhibit that could help establish the Communication component of the Shared Vision element?

Do you have any suggestions for additions, edits, or deletions from the ideal and unacceptable behaviors table above? Please be very specific with any suggestions.

8. Academy Advisory Boards: Stakeholders form advisory boards to develop or evolve career academies and pathways that reflect current industry trends and school needs.

**Sub Component: Participation**

| **8. Academy Advisory Boards:** Stakeholders form advisory boards to develop or evolve career academies and pathways that reflect current industry trends and school needs. | | | |
|---|---|---|---|
| **Sub Component:** | **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| **Participation** | Stakeholders are willing to participate as board members. Commitment to participation and follow-through from participants and board members.<br><br>Stakeholders are willing to meet later in the day to fit work schedules<br><br>Term limits are implemented to support rotating voices/new seats at the table<br><br>Stakeholders show enthusiasm when working with students<br><br>Time and resources are provided to establish academy advisory boards through organized, consistent, and structured collaboration meetings.<br><br>Mentors help suggest and share industry trends and the best pathways to start and or take | | There is a lack of attendance and participation from stakeholders at planned meetings.<br><br>Participants have an attitude of entitlement, disrespect, and want to adhere to the status quo.<br><br>Poor communication about the purpose of meetings and there is no follow up with stakeholders<br><br>Mentors are not involved and too busy to be a mentor or work together. |

What might be acceptable behaviors (not ideal, but not unacceptable) that teachers, school leaders, and business partners might exhibit that could help establish the Participation component of the Academy Advisory Boards element?

Do you have any suggestions for additions, edits, or deletions from the ideal and unacceptable behaviors table above? Please be very specific with any suggestions.

**Sub Component: Relationships**

| **8. Academy Advisory Boards:** Stakeholders form advisory boards to develop or evolve career academies and pathways that reflect current industry trends and school needs. | | | |
|---|---|---|---|
| **Sub Component:** | **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| **Relationships** | Stakeholders create strong relationships with business partners and get involved with industry events when possible. | | Stakeholders do not build on the business relationship to create a mutually beneficial partnership or a plan that will benefit students.<br><br>There is no buy-in from the industry.<br><br>Stakeholders do not use the experience to create |

What might be acceptable behaviors (not ideal, but not unacceptable) that teachers, school leaders, and business partners might exhibit that could help establish the Relationships component of the Academy Advisory Boards element?

Do you have any suggestions for additions, edits, or deletions from the ideal and unacceptable behaviors table above? Please be very specific with any suggestions.

**Phase 3: Round 2-Part A: Business Collaboration Behaviors**

I am a Hawai‘i career academy/CTE...
*Select one.*

☐ Teacher
☐ School Leader
☐ Business Partner

In this round, you will be asked to review the contributions from the previous rounds and make suggestions for additions, edits, or deletions. Please evaluate each indicator and ensure they align with the definition of each element.

1. Structured Student Internship/Mentorship Program. Evaluate each indicator to ensure they align with the element's definition: Schools and business partners collaborate to provide students with authentic experiences and training in career fields [through structured student internship/mentorship programs].

Structured Student Internship/Mentorship Program: Sub Component Collaboration.

| 1. Structured Student Internship/Mentorship Program:<br>Schools and business partners collaborate to provide students with authentic experiences and training in career fields.<br><br>Sub Component: Collaboration | | |
|---|---|---|
| **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| A. Strong collaborative relationships between business partners and schools are fostered by defining a working relationship and trust in each other's intent. | A. Collaborative relationships are established through open and consistent communication. Stakeholders use disagreements as an opportunity to determine working structures and strengthen the relationship | A. Stakeholders are skeptical of each other's intent and induce toxic conflict. |
| B. Stakeholders are committed to the decided plan whether or not they are in total consensus. They take accountability and follow through with their identified responsibilities. | B. Stakeholders are willing to compromise and accept the agreed-upon plan though concerns or disagreements with portions are expressed They are held accountable to following through with agreements and identified responsibilities. | B. Stakeholders are unwilling to compromise and lack commitment to the agreed-upon plan. *(Accountability portion?)* |

A. IDEAL behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

ACCEPTABLE behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

UNACCEPTABLE behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

Structured Student Internship/Mentorship Program: Sub Component Communication

| 1. Structured Student Internship/Mentorship Program:<br>Schools and business partners collaborate to provide students with authentic experiences and training in career fields.<br>Sub Component: Communication | | |
|---|---|---|
| **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| A. There is regular and consistent communication between stakeholders. | A. Communication between stakeholders is fairly consistent though some assumptions of understandings are made. If a stakeholder is unable/unwilling to communicate, the organization selects a temporary substitute/replacement. | A. There is a lack of prompt, efficient, and open communication. |
| B. Open-minded discussions of all ideas and issues occur with room for respectful, constructive conflict. | B. Stakeholders can agree to disagree and reach common ground. | B. Retention of ideas and issues occurs as a result of passive-aggressiveness. |
| C. Discussions are student-centered focusing on realistic expectations and outcomes for students | C. Decisions made are student-centered but may require more communication to determine the feasibility of student outcomes. | C. Decisions are made that are not student-centered. |
| D. A common language and terminology are created to foster communication. | D. A common language and terminology are outlined as the need arises. | D. ? |
| E. ? | E. ? | E. There is no communication about student growth or changes to student placement in the program. |
| F.? | F.? | F. Arrangements for internships/mentorships are made without either business partner or school knowledge/approval. |

B. IDEAL behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

ACCEPTABLE behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

UNACCEPTABLE behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

Structured Student Internship/Mentorship Program: Sub Component Application Process

| 1. Structured Student Internship/Mentorship Program:<br>Schools and business partners collaborate to provide students with authentic experiences and training in career fields.<br><br>Sub Component: Application Process | | |
|---|---|---|
| **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| A. A well-organized application process to identify students for mentorship/internship programs is developed. | A. An application process is in place but needs refinement. | A. The application process is disorganized. |
| B Expectations for the program are clearly communicated to students and students are allowed to apply to a specific mentorship/internship location. | B. Expectations for the program are shared with students and students can state their preference for specific mentorship/internship locations. | B. |
| C. The application process requires students to self-advocate demonstrating their dedication, responsibility, and endurance to complete a mentorship/internship assignment. | C. The application process is easily accessible to students who are able to self-advocate and expresses the expectation for students to commit for a specified time frame in order to complete the internship | C.? |
| D.? | D. Stakeholder (including students, parents/guardians) are allowed to ask questions about the proposed program prior to application submission | D? |

C. IDEAL behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

ACCEPTABLE behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

UNACCEPTABLE behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

Structured Student Internship/Mentorship Program: Sub Component Student Participation in Program

| 1. Structured Student Internship/Mentorship Program:<br>Schools and business partners collaborate to provide students with authentic experiences and training in career fields.<br><br>Sub Component: Student Participation in Program | | |
|---|---|---|
| **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| A. Students participate in a variety of realistic tasks that reflect authentic participation in the occupation including entry level/operational | A. Students participate in daily tasks appropriate for the internship experience | A. Students do not participate in tasks that reflect authentic participation in the occupation. |
| B. Student safety is ensured by vetting potential mentors and internship locations. | B. Student safety is a priority for all stakeholders. | B. Students are asked to meet alone with unvetted adults. |
| C. Stakeholders collaborate to find placements that have long-term benefits for students. Program participation exceeds graduation requirements | C. Stakeholders try to find placements that engage student interests, have short-term benefits for students, or will give students an edge in their post-secondary pursuits | C. Placement in the program is granted to meet a school requirement and does not reflect student interest or college/career goals. Business partners refuse students for reasons other than behavior or safety concerns. |
| D. The program has a flexible timeline increasing potential student participation. | D. Some flexibility exists, but students are expected to arrange their schedule to meet the structured timeline of the program. | D.? |
| E. The program encourages students to become lifelong learners, innovators, and develop a growth mindset. | E.? | E. Students are advised away from the internship/mentorship program. |

D. IDEAL behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

ACCEPTABLE behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

UNACCEPTABLE behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

Structured Student Internship/Mentorship Program: Sub Component Mentors

| 1. Structured Student Internship/Mentorship Program:<br>Schools and business partners collaborate to provide students with authentic experiences and training in career fields.<br>Sub Component: Mentors | | |
|---|---|---|
| **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| A. The mentorship program is structured and well organized. | A. The mentorship program is structured and organized. | A. |
| B. Scheduled timeline for meetings between students and mentors (business and school level) is established. | B. Meetings between students and their mentors occur (business and/or school level). Mentors reschedule meetings when necessary. | B. Lack of communication between school and business level mentors. |
| C. School and business level mentors have clearly defined roles and responsibilities. | C. School and business level mentors are aware of each other's' responsibilities and clear roles provided to the students. | C. |
| D. Mentors have meaningful discussions about professionalism and job expectations *with* students and model professionalism *to* students. | D. Mentors model professionalism to students, but tell rather than discuss professionalism aspects | D. |
| E.? | E. Mentors may constructively discuss shortcomings of the school or business to provide a realistic view of the occupation or preparatory program | E. Shortcomings of the school or business are discussed in front of student(s) in a derogatory manner. |
| F. Mentors are interviewed ensure they are committed to the internship for the benefit of the student, not the mentor | F.? | F? |
| G.? | G. Student is occasionally placed in the role of an observer while the mentor must tend to their responsibilities | G. Students do not receive support from their mentors |

E. IDEAL behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

ACCEPTABLE behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

UNACCEPTABLE behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

2. Faculty Externships. Evaluate each indicator to ensure they align with the element's definition: Business partners communicate current industry trends, demands, and expectations to schools through faculty externships with business partners.

Faculty Externships: Sub Component During Externship

| 2. Faculty Externships: Business partners communicate current industry trends, demands, and expectations to schools through faculty externships with business partners<br><br>Sub Component: During Externship | | |
|---|---|---|
| **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| A. Participants openly share and learn from each other's experiences and knowledge identifying skills and knowledge students need to thrive in a specific industry. They look beyond obvious connections and see more nuanced opportunities. | A. Participants share experiences and knowledge with the intent of brining a better understanding of the industry to the classroom. | A. Stakeholders do not use the experience to build the business relationship to create a mutually beneficial partnership. Educators are unwilling to bring new practices or externship experiences to the classroom. |
| B. All stakeholders willing and open to trying new things, engaged, and participate with fidelity. Interactions and language between all participants are courteous and complimentary. | B. All stakeholders participate and are willing to try new things. Interactions between participants is civil and solutions-oriented. | B. Stakeholders' participation lacks commitment and interest. They are arrogant, non-compliant, and use language that is directed toward discrediting each other. |
| C. Mentors are involved in externships. | C. Mentors have limited involvement in externships | C. Mentors are not involved in externships. |
| D. Time to network with business partners is provided. | D. Time to work with business partners is not built into the program. | D.? |

F. IDEAL behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

ACCEPTABLE behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

UNACCEPTABLE behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

Faculty Externships: Sub Component Planning and Preparation

| 2. Faculty Externships: Business partners communicate current industry trends, demands, and expectations to schools through faculty externships with business partners<br>Sub Component: Planning and Preparation | | |
|---|---|---|
| **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| A. Outcomes for externship are clearly communicated to, and agreed upon by, all stakeholders. | A. Intended outcome are presented to participants | A. School leadership does not foster buy-in to the purpose of faculty externships. |
| B. Teacher needs and gaps are communicated to business partners and intermediaries. | B. There is consistent communication between stakeholders | B. The externship is disorganized, lacking in transparency and communication. |
| C. Adequate time to conduct and debrief externships is embedded in the school calendar | C. Some time to conduct and debrief externships is embedded in the school calendar. | C.? |
| D.? | D. Business leaders organize and run the externship | D. There is an expectation that business leaders organize and run the externships |
| E. Externships relate to multiple career pathways offered by the school and can shift in audience and priority | E. Externships are aligned with career pathways offered by the school | E. Externships are not connected to career pathways offered by the school |

G. IDEAL behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

ACCEPTABLE behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

UNACCEPTABLE behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

Link to Part B Questionnaire:
If you would like to continue to Part B, here is the link:
https://forms.gle/gPuS9fEQaMyz2v9v5

**Part B - Phase 3: Round 2: Business Collaboration Behaviors**

I am a Hawai‘i career academy/CTE...
*Select one.*

☐ Teacher
☐ School Leader
☐ Business Partner

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In this round, you will be asked to review the contributions from the previous rounds and make suggestions for additions, edits, or deletions. Please evaluate each indicator and ensure they align with the definition of each element.

3. Co-Created Career Themed Curriculum: Students engage with a cross-curricular career/industry themed curriculum that is co-created by schools and business partners. The curriculum is problem/project-based and aligned with current industry and community needs as well as academic standards.

Co-Created Career Themed Curriculum: Sub Component Planning and Collaboration

| **3. Co-Created Career Themed Curriculum:** Students engage with a cross-curricular career/industry themed curriculum co-created by schools and business partners. The curriculum is problem/project-based and aligned with current industry and community needs as well as academic standards. | | |
|---|---|---|
| **Sub Component: Planning and Collaboration** | | |
| **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| A. Time and resources are provided to collaborate with business partners and create the curriculum.<br><br>B. Business partners guide collaborative creation of meaningful curriculum connected to the industry ensuring contextual teaching and learning scenarios<br><br>C. Planning and collaboration meetings are frequently scheduled. *(any indicator additions about attendance/participation?)*<br><br>D. Stakeholders are flexible, honest, open-minded, willing to learn, and have an innovative mindset. *(Should we move* 'and focus on student success' *here?)*<br><br>E. Facilitators are identified to advance and motivate the development process. | A. Some time and resources are provided to align curriculum on a flexible schedule convenient for the majority of the committee.<br><br>B. Curriculum is relevant but not revolutionary<br><br>C. Planning and collaboration meetings occur at least once per grading period/quarter. Stakeholders provide feedback but do not always attend meetings.<br><br>D. Stakeholders use a variety of tools (virtual, email, in-person) to consistently communicate. Interactions are positive, respectful, and focus on student success. *(Does this indicator outrank the ideal behavior description?)*<br>E. A leadership structure is in place to facilitate the process. | A. There is a disregard for collaborating as a means to benefit students. *(Any indicators additions about time and resources?)*<br><br>B. The curriculum lacks content integration. It is short-sighted, focusing on obvious connections, stereotypes, and quick wins.<br><br>C. Stakeholders lack of commitment *(any indicator additions about meeting frequency?)*.<br><br>D. There is a lack of communication, collaboration, and follow through<br><br>E. *Indicator suggestions?* |

1. IDEAL behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

ACCEPTABLE behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

UNACCEPTABLE behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

Co-Created Career Themed Curriculum: Sub Component Stakeholder Contributions

| **3. Co-Created Career Themed Curriculum:** Students engage with a cross-curricular career/industry themed curriculum co-created by schools and business partners. The curriculum is problem/project-based and aligned with current industry and community needs as well as academic standards.<br><br>Sub Component: Stakeholder Contributions | | |
|---|---|---|
| **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| A. All stakeholders are actively involved in and equally contribute to curriculum development.<br><br>B. Business partners identify specific industry expectations and soft skills to include in the curriculum *(might need additions to elevate above acceptable behavior indicator)*<br><br>C?<br><br>*D. (indicator additions about contributions?)* | A. The school leads the curriculum development with input and contributions from stakeholders.<br><br>B. Business partners share industry expectations and skills to support the school's curriculum planning efforts *(should the ideal and acceptable behaviors switch for this indicator?)*<br><br>C. Educators and business partners agree upon adjustments to the curriculum.<br><br>D. Stakeholders may contribute to employability skills conversation via virtual means (email, Google survey, etc.) | A. Stakeholders are siloed in responsibilities and convey one-sided needs or wants.<br><br>B. ?<br><br>C. Stakeholders are rigid and unwilling to compromise or adjust curriculum to meet another's needs.<br><br>*D. (indicator additions about contributions?)* |

2. IDEAL behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

ACCEPTABLE behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

UNACCEPTABLE behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

4. Co-develop Employability Skills for Students: Evaluate each indicator to ensure they align with the element's definition- School and business partners co-develop employability skills applicable to the academy's industry and ways to evaluate student performance with these skills.

Co-develop Employability Skills for Students: Sub Component Collaboration and Communication

| **4. Co-develop Employability Skills for Students:** School and business partners co-develop employability skills applicable to the academy's industry and ways to evaluate student performance with these skills.<br><br>Sub Component Collaboration and Communication | | |
|---|---|---|
| **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| A. Time and resources are provided so teachers can co-develop employability skills with business partners and develop an authentic curriculum to teach students these skills.<br>B. A structured system to gather and discuss input from all stakeholders is developed.<br><br>C. There is frequent communication and active collaboration between all groups. Stakeholders are flexible and open-minded.<br><br>D. *(indicator additions about meeting attendance*?) | A. Time and resources are provided to teachers for developing employability skills and an associated curriculum.<br><br>B. Business partners review and provide feedback on the teacher developed employability skills.<br><br>C. Stakeholders communicate and collaborate on a regular basis.<br><br>D. Stakeholders who cannot attend a meeting contribute virtually/via email or assign a representative to gather information. | A. Stakeholders are unwilling to make time to meet and develop employability skills.<br><br>B. Schools do not incorporate suggestions from business partners.<br><br>C. Stakeholders do not communicate.<br><br>D. *(indicator additions about meeting attendance*?) |

3. IDEAL behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

ACCEPTABLE behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

UNACCEPTABLE behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

Co-develop Employability Skills for Students: Sub Component Development and Implementation

**4. Co-develop Employability Skills for Students:** School and business partners co-develop employability skills applicable to the academy's industry and ways to evaluate student performance with these skills.

Sub Component Development and Implementation

| Ideal Behaviors | Acceptable Behaviors | Unacceptable Behaviors |
|---|---|---|
| A. Stakeholders collaborate to develop employability skills that reflect current industry demands, align with content standards, and General Learner Outcomes (GLOs) | A. Employability skills are updated to match industry changes and align with either content standards or GLOs | A. Skills are selected that do not align with industry demands. |
| B. Stakeholders share an understanding of, and expectations for, implementing employability skills in schools. | B. Stakeholders plan to implement employability skills in schools | B. Stakeholder groups do not align expectations and understandings of employability skills. |
| C. Employability skill expectations meet industry appropriate levels to prepare students for post-secondary demands | C. Employability skill expectations and lessons are developed at high school appropriate levels. | C. Employability skills are not reinforced in schools. |
| D. Students are provided frequent opportunities to apply and demonstrate proficiency with employability skills | D. Students have opportunities to practice employability skills | D. *(addition about implemented?)* |
| E. Realistic and measurable student result indicators are developed *(should this switch acceptable?).* | E. A rubric is developed to provide feedback to students on the employability skill performance *(should this be the ideal behavior?).* | E. Students do not receive feedback on ways to improve skills. |
| F. All stakeholders model professionalism to students by following employability expectations. | F. | F. Stakeholders do not follow employability skills expectations |

4. IDEAL behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

ACCEPTABLE behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

UNACCEPTABLE behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

5. Work-Based Learning Opportunities (WBL): Evaluate each indicator to ensure they align with the element's definition- Schools and business partners collaborate to provide work-based experiences (guest speaking, capstone courses, mock interviews, etc.) that help students plan and execute their post-high school goals.

Work-Based Learning Opportunities (WBL): Sub Component WBL opportunity development

| **5. Work-Based Learning Opportunities (WBL):** Schools and business partners collaborate to provide work-based experiences (guest speaking, capstone courses, mock interviews, etc.) that help students plan and execute their post-high school goals.<br><br>Sub Component WBL opportunity development | | |
|---|---|---|
| **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| A. WBL opportunities communicate ideas that contain social currency and are visible, top of mind, deliver a feeling, package easily, and are wrapped into a compelling story. *(additions about frequency of WBL events?)*<br><br>B. WBL event is aligned to a career pathway and provides students with opportunities to practice employability skills with industry partners<br><br>C. WBL opportunities are well organized with clear expectations for participants and a flexible timeline allowing increased student participation.<br><br>D. Planned follow-up after the WBL opportunity occurs. | A. WBL opportunities have real-world implications that consider the school, student and community.<br><br>B. The WBL event is aligned to a career pathway<br><br>C. WBL opportunities are organized with clear expectations for participants. Flexibility is constrained by student, school, and community factors.<br><br>D. Limited follow up after the WBL opportunity | A. The goals/requirements of the opportunity are set to a level that excludes or overwhelms students.<br><br>*B. (additions for unacceptable pathway alignment?)*<br><br>C. WBL opportunities are disorganized and there is poor communication between facilitators.<br><br>D. There is no follow-up after a WBL opportunity is established/created. |

5. IDEAL behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

ACCEPTABLE behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

UNACCEPTABLE behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

Work-Based Learning Opportunities (WBL): Sub Component Stakeholder involvement

| **5. Work-Based Learning Opportunities:** Schools and business partners provide work-based learning opportunities (guest speaking, judging student projects, mock interviews, etc.) that help students plan and execute their post-high school goals.<br><br>Sub Component Stakeholder Involvement | | |
|---|---|---|
| **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| A. The WBL opportunity is a collaborative effort where all stakeholders have a clear return on investment. | A. Collaborators are committed to the investment and partnership | A. Stakeholders do not build on the business relationship to create a mutually beneficial partnership |
| B. Stakeholders have strong and communication, commitment, and consistent scheduled meeting times. | B. There is strong communication between stakeholders.<br>B. Businesses communicates with schools when they cannot meet a requirement or attend an event. | B. Stakeholder groups do not support each other *(Additions about communication?)* |
| C. Schools and business partners select strong intermediaries to support the partnership structure. | C? | C. Stakeholders do not use the WBL experience to create a plan that will benefit students. |
| D. All stakeholders receive DOE regulation training on WBL site safety | D. A plan for safety trainings are established | D. ? |
| E. Partners are involved with mentors and mentors invite and involve their partners *(needs clarification: who's mentors? What mentors are involved in the WBL?)* | E. Students are supported by mentors to ensure a positive WBL experience *(needs clarification: who's mentors? What mentors are involved in the WBL?)* | E. Mentees and mentors avoid and do not invite each other *(needs clarification: who's mentors? What mentors are involved in the WBL?)* |

6. IDEAL behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

ACCEPTABLE behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

UNACCEPTABLE behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

Work-Based Learning Opportunities (WBL): Sub Component Student Interactions

| **5. Work-Based Learning Opportunities:** Schools and business partners provide work-based learning opportunities (guest speaking, judging student projects, mock interviews, etc.) that help students plan and execute their post-high school goals.<br><br>Sub Component Student Interactions | | |
|---|---|---|
| **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| A. Stakeholders show enthusiasm in working with students. | A. Stakeholders have positive attitudes and interactions with students | A. Facilitators lack passion, are uninspiring, or have a negative attitude about their career |
| B. Stakeholders collaborate to ensure students are prepared for participation in the opportunities. | B. Stakeholders understand the benefits of collaborating to prepare students for WBL opportunities. | B. No time is allocated to prepare or support students for success with WBL opportunities. |
| C.*(add indicator to address importance/potential)?* | C. Educators discuss WBL events to provide deeper understanding of the experience | C. The importance of WBL opportunity is understated to students.<br>Students are allowed to not take WBL opportunities seriously. |

7. IDEAL behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

ACCEPTABLE behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

UNACCEPTABLE behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

6. Students Participate in Business Partner Events: Evaluate each indicator to ensure they align with the element's definition- Students are offered service or volunteer opportunities at business partner events (job fairs, beach clean-ups, family fairs, etc.).

Students Participate in Business Partner Events: Sub component: Stakeholder Roles

| **6. Students participate in business partner events:** Students are offered service or volunteer opportunities at business partner events (job fairs, beach clean-ups, family fairs, etc.).<br><br>Sub component: Stakeholder Roles | | |
|---|---|---|
| **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| A. Stakeholders collaborate to provide multiple, diverse volunteer experiences for students at business partner events. | A. Stakeholders plan some volunteer experiences for students at business partner events. | A. Stakeholders do not attempt to plan and organize volunteer experiences for students at business partner events. |
| C. Business partners connect and follow up with students to include them in official business events or internship opportunities. | C. Business partners offer a sign-in sheet for student participants and attempt to follow up with students. | C. There is a lack of follow-up with students after the event. |
| D. Businesses are open to including minors in official events. *(move to acceptable?)* | D. Business partners actively recruit student volunteers and adults welcome students at events *(should this move to ideal?)* | D. Business partner event opportunities are not communicated to students. |
| E. Stakeholders lead by example through sincere participation in events and show enthusiasm when working with students. | E. Stakeholders and student mentors lead by example when participating in events and interacting with students. | E.? |
| F. Student internship mentors get involved in events and invite/include mentees. | F.? | F. Mentors and Partners do not communicate or work together. |

8. IDEAL behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

ACCEPTABLE behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

UNACCEPTABLE behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

Students Participate in Business Partner Events: Sub Component: Preparing Students

| 6. Students participate in business partner events: Students are offered service or volunteer opportunities at business partner events (job fairs, beach clean-ups, family fairs, etc.).<br><br>Sub Component: Preparing Students | | |
|---|---|---|
| **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| A. Students are able to express the connection between business partner events and future workforce goals | A. Stakeholders communicate the connections between the event and workforce needs to students | A. Stakeholders do not communicate the connection between the event and workforce needs |
| B. Clear adult interaction guidelines, objectives, and expectations are established for students. *(Move to acceptable?)* | B. Students are expected to demonstrate their proficiency with employability skills while volunteering at business partner events *(Move to ideal?)* | B. Value is placed on perfection in student performance over progress (*does this need more clarification?).* |
| C. Prior to event shy students are prepared with strategies that will help them rise above their comfort zone and connect with individuals at events. *(addition to address all students prepared?)* | C. Prior to event, students are prepared to interact with adults and encouraged to venture outside of their comfort zone. | **C/D.** No assistance, planning, or preparation is provided for students prior to event participation. |
| D. Before an event, teachers share guest lists with students and help them decide who to seek out at the event. | D. Teachers are available to be with students during events | |
| E. Stakeholders encourage students to participate in business partner events as a way to create more opportunities | E.? | E.? |

9. IDEAL behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

ACCEPTABLE behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

UNACCEPTABLE behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

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Link to Part C

If you would like to continue to Part C, here is the link:
https://forms.gle/86ZxqBMSQXtQcFGA6

**Phase 3: Round 2- Part C : Business Collaboration Behaviors**

I am a Hawai‘i career academy/CTE...
*Select one.*

☐ Teacher
☐ School Leader
☐ Business Partner

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In this round, you will be asked to review the contributions from the previous rounds and make suggestions for additions, edits, or deletions. Please evaluate each indicator and ensure they align with the definition of each element.

7. Shared Vision for Partnership: Evaluate each indicator to ensure they align with the element's definition: Schools and business partners define outcomes, parameters, and purposes for the partnership

Shared Vision for Partnership: Sub Component Establishing Vision

| **7. Shared Vision for Partnership:** Schools and business partners define outcomes, parameters, and purposes for the partnership<br><br>Sub Component: Establishing Vision | | |
|---|---|---|
| **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| A. All stakeholders are provided with time and resources to collaborate and establish a shared vision for the **partnership**. | A. Teachers and industry partners have opportunities to develop a vision to communicate the focus of the **partnership**. | A. There is little to no effort given to establishing a shared vision for the **partnership** |
| B.? *(add perspective/attitude indicator?)* | B. Stakeholders are willing to adjust their perspective and commit to the vision for the benefit of students | B. Stakeholders are not willing to compromise, explore new options, and are narrow-minded in scope. |
| C. There is buy-in and commitment to the common vision. | C. There is buy-in and commitment to an established vision | C. Stakeholders do not know the vision. |
| D. The shared vision for the partnership aligns with both the career academy's vision and partners business vision. Students reflect on how shared vision plays a role in their development | D.? *(add alignment of vision indicator?)* | D.? *(add alignment of vision indicator?)* |
| E. Stakeholders are willing to learn about the whole school community *(Clarification needed: how does this affect the shared vision?)* | E. Stakeholders are willing to learn about the whole school community*(Clarification needed: how does this affect the shared vision?)* | E. Stakeholders make assumptions. *(needs clarification: about what/who?)* |

IDEAL behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

ACCEPTABLE behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

UNACCEPTABLE behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

Shared Vision for Partnership: Sub Component: Communication

| **7. Shared Vision for Partnership:** Schools and business partners define outcomes, parameters, and purposes for the partnership.<br><br>Sub Component: Communication | | |
|---|---|---|
| **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| A. There is open and consistent communication between all groups, allowing for constructive criticism.<br><br>B. All stakeholders are very familiar with the vision and use it as a guiding light to focus important **partnership** issues.<br>C.? *(add use of vision for curriculum/teaching?).*<br><br>D. A regular meeting schedule with structured agendas is established. | A. Communication occurs regularly and is mostly positive.<br>Stakeholders are flexible and willing to compromise.<br><br>B. Relationships built between stakeholders are focused on the internship program and may be limited in scope.<br><br>C. Teachers and business partners can access the vision and use it as a lens to guide projects and develop goals for students<br><br>D. Set meeting times and outcomes are communicated to stakeholders<br><br>If a stakeholder cannot attend a meeting, they will select a temporary representative *(move to ideal?)* | A. There is a lack of communication and collaboration.<br><br>B. Stakeholders do not build on partnerships to create a mutually beneficial plan for students<br><br>C. Educators conduct teaching methods that ignore or disregard the vision.<br><br>D.? *(Add meeting times indicators?)* |

IDEAL behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

ACCEPTABLE behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

UNACCEPTABLE behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

8. Academy Advisory Boards: Evaluate each indicator to ensure they align with the element's definition- Stakeholders form advisory boards to develop or evolve career academies and pathways that reflect current industry trends and school needs.

Academy Advisory Boards: Sub Component: Member Roles

| **8. Academy Advisory Boards:** Stakeholders form advisory boards to develop or evolve career academies and pathways that reflect current industry trends and school needs.<br><br>Sub Component: Member Roles | | |
|---|---|---|
| **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| A. Teachers, school leaders, and business partners actively recruit students, parents, and community members as board members or participants.<br><br>B. Board members and participants share current industry trends and propose career pathway evolutions to meet these trends.<br><br>C. Board members and participants are committed to participation and willing to meet later in the day to fit work schedules *(add attendance?)*<br><br>D. Stakeholders follow-through with commitments and assigned tasks.<br><br>E. Term limits are implemented to support rotating voices/new seats at the table | A. Stakeholders are willing be board members OR an active participant if they cannot serve on the board. *(add indicators about recruitment?)*<br><br>B. Advisory board members and participants suggest the best pathways to start and or take to enter a career.<br><br>C. Most board members and participants regularly attend and participate in meetings though there are no expectations to meet beyond the scope of the work day<br><br>D. *(Additional indicators: follow through?)*<br><br>E. *(additional indicators: term limits?)* | A. Stakeholders do not make time to be involved with the advisory board *(add indicators about recruitment?)*<br><br>B. There is no buy-in from the industry. Participants and want to adhere to the status quo. *(Clarification:* status quo*? In terms of what/who?)*<br><br>C. There is a lack of attendance and participation from stakeholders at planned meetings.<br><br>D. There is no follow through by stakeholders<br><br>E. *(additional indicators: term limits?)* |

IDEAL behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

ACCEPTABLE behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

UNACCEPTABLE behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

Academy Advisory Boards: Sub Component: Communication and Relationships

| **8. Academy Advisory Boards:** Stakeholders form advisory boards to develop or evolve career academies and pathways that reflect current industry trends and school needs.<br><br>Sub Component: Communication and Relationships | | |
|---|---|---|
| **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| A. Schools create strong, positive relationships with business partners and get involved with industry events when possible. *(add benefits to students?)* | A. Stakeholders build positive relationships to create opportunities for students, though there may be limited effort made to expand program offerings. | A. Stakeholders do not build on the business relationship to create a mutually beneficial partnership or a plan that will benefit students. |
| B. Time and resources are provided to establish academy advisory boards through organized, consistent, and structured collaboration meetings. | B. Some time and resources are allocated for stakeholders to meet and collaborate. | B. *Add indicator: time and resources allotment?* |
| C. ***(additions about meeting purpose?)*** | C. The purpose of and for meetings is communicated to members and participants. There is positive, consistent, and open communication between all stakeholders. *(Should this part move to ideal?)* | C. There is poor communication between stakeholders. Few known the purpose of and for the meeting |
| D. Stakeholders show enthusiasm when working with students | D. Stakeholders have a positive attitude and work well with students. | D. Participants have an attitude of entitlement and disrespect. |

IDEAL behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

ACCEPTABLE behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

UNACCEPTABLE behaviors: Suggestions for edits, additions, or deletions (please specifically label with corresponding letter from table above).

## Phase 3: Round 3- Part A: Business Collaboration Behaviors

I am a Hawaiʻi career academy/CTE...
*Select one.*

☐ Teacher
☐ School Leader
☐ Business Partner

Please rank the 'acceptable' indicators according to your level of endorsement.

All indicators with an average ranking of moderately or strongly endorsed will remain in the implementation map. Those with an average ranking of minimally or not endorsed will be removed.

1. Acceptable behaviors for- Structured Student Internship/Mentorship Program: Schools and business partners collaborate to provide students with authentic experiences and training in career fields.

Sub Component: Collaboration Entire Implementation Map for Reference

| **1. Structured Student Internship/Mentorship Program:** Schools and business partners collaborate to provide students with authentic experiences and training in career fields.<br><br>Sub Component: Collaboration | | |
|---|---|---|
| **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| A. Strong collaborative relationships between business partners and schools are fostered by defining a working relationship and trusting in each other's intent. | A. Collaborative relationships are established through open and consistent communication. Stakeholders use disagreements as an opportunity to determine working structures for the partnership. | A. Stakeholders are skeptical of each other's intent and induce toxic conflict. |
| B. Stakeholders are committed to an agreed-upon plan whether or not they are in total consensus. They take accountability and follow through with agreements. | B. Stakeholders are willing to compromise and accept a decided plan though concerns or disagreements with portions are expressed. They are held accountable for following through with agreements. | B. Stakeholders are unwilling to compromise and lack commitment to a plan. They do not follow through with identified responsibilities and agreements. |
| C. Business partners and school personnel regularly collaborate to approve and arrange student internships/mentorship opportunities. | C. Schools initiate internship/mentorship opportunities as the need arises. Student participation occurs with both business partners and school knowledge/approval. | C. Arrangements for internships/mentorships are made without either business partner or school knowledge/approval. |

Sub Component: Collaboration- Acceptable Indicators ONLY

All indicators with an average ranking of moderately or strongly endorsed will remain in the implementation map. Those with an average ranking of minimally or not endorsed will be removed.

| | |
|---|---|
| A. Collaborative relationships are established through open and consistent communication. Stakeholders use disagreements as an opportunity to determine working structures for the partnership. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| B. Stakeholders are willing to compromise and accept a decided plan though concerns or disagreements with portions are expressed. They are held accountable for following through with agreements. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| C. Schools initiate internship/mentorship opportunities as the need arises. Student participation occurs with both business partners and school knowledge/approval. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |

Are there any ideal or unacceptable indicators that you either MINIMALLY or do NOT endorse (would like removed?) Please be specific as to which indicator(s) [EG: A. Ideal, or B. unacceptable].

Any final comments or suggestions for this sub-component?

1. Structured Student Internship/Mentorship Program: Sub Component: Communication

Sub Component: Communication Entire Implementation Map for Reference

| **1. Structured Student Internship/Mentorship Program:** Schools and business partners collaborate to provide students with authentic experiences and training in career fields. Sub Component: Communication | | |
|---|---|---|
| **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| A. Common language and terminology are created to foster regular and consistent communication between stakeholders. | A. Common language and terminology are outlined as the need arises. Regular communication between stakeholders occurs. | A. Communication is neither prompt nor efficient. The lack of a common language and terminology causes miscommunication and misunderstandings. |
| B. Open-minded discussions of all ideas and issues occur with room for respectful, constructive conflict. | B. Stakeholders can agree to disagree and reach common ground. | B. Retention of ideas and issues occur as a result of passive-aggressiveness. |
| C. Discussions are student-centered focusing on realistic expectations and outcomes for students. Expectations for the program are clearly communicated to students. | C. Outcomes are developed through student-centered discussions, but their feasibility is untested. Program expectations are shared with students. | C. Decisions are not student-centered. Students are unaware of program expectations. |
| D. Student growth is analyzed and discussed regularly. These discussions drive decisions about changes to student placement in the program. | D. Stakeholders have opportunities to discuss student growth. Student growth is a factor when determining potential changes to student placement in the program. | D. There is no communication about student growth or changes to student placement in the program. |

Sub Component: Communication-Acceptable Indicators ONLY

All indicators with an average ranking of moderately or strongly endorsed will remain in the implementation map. Those with an average ranking of minimally or not endorsed will be removed.

| | |
|---|---|
| A. Common language and terminology are outlined as the need arises. Regular communication between stakeholders occurs. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| B. Stakeholders can agree to disagree and reach common ground. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| C. Outcomes are developed through student-centered discussions, but their feasibility is untested. Program expectations are shared with students. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| D. Stakeholders have opportunities to discuss student growth. Student growth is a factor when determining potential changes to student placement in the program. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |

Are there any ideal or unacceptable indicators that you either MINIMALLY or do NOT endorse (would like removed?) Please be specific as to which indicator(s) [EG: A. Ideal, or B. unacceptable]

Any final comments or suggestions for this sub-component?

1. Structured Student Internship/Mentorship Program: Sub Component: Application Process

Sub Component: Application Process Entire Implementation Map for Reference

| **1. Structured Student Internship/Mentorship Program:** Schools and business partners collaborate to provide students with authentic experiences and training in career fields.<br><br>Sub Component: Application Process | | |
|---|---|---|
| **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| A. A well-organized application process that identifies students for mentorship/internship programs is developed.<br><br>B. The application process requires students to self-advocate demonstrating their dedication, responsibility, and endurance to complete an internship/ mentorship assignment.<br><br>C Students can apply to a specific mentorship/internship location.<br><br>D. Schools and business partners work to proactively answer questions. Stakeholders are encouraged to ask questions and supply feedback about the program prior to application submission. | A. An application process is in place but needs refinement.<br><br>B. The application process is easily accessible to students who are able to self-advocate. The application expresses the expectation that students commit for a specified time frame to complete the internship/ mentorship assignment.<br><br>C. Students can state their preferences for specific mentorship/internship locations.<br><br>D. Stakeholders are allowed to ask questions about the proposed program prior to application submission. | A. The application process is disorganized and hard to follow.<br><br>B. The application is not easily accessible to students. It does not communicate the expectation that students self-advocate or commit to completing the internship/mentorship assignment.<br><br>D. Students and parents/guardians are discouraged from asking questions about the program and receive little or no help from stakeholders. |

Sub Component: Application Process- Acceptable Indicators ONLY

All indicators with an average ranking of moderately or strongly endorsed will remain in the implementation map. Those with an average ranking of minimally or not endorsed will be removed.

| | |
|---|---|
| A. An application process is in place but needs refinement. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| B. The application process is easily accessible to students who are able to self-advocate. The application expresses the expectation that students commit for a specified time frame to complete the internship/ mentorship assignment. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| C. Students can state their preferences for specific mentorship/internship locations. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| D. Students and parents/guardians are allowed to ask questions about the proposed program prior to application submission. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |

Are there any ideal or unacceptable indicators that you either MINIMALLY or do NOT endorse (would like removed?) Please be specific as to which indicator(s) [EG: A. Ideal, or B. unacceptable]

Any final comments or suggestions for this sub-component?

1. Structured Student Internship/Mentorship Program: Sub Component: Student Participation in Program

Sub Component: Student Participation in Program Entire Implementation Map for Reference

| **1. Structured Student Internship/Mentorship Program:** Schools and business partners collaborate to provide students with authentic experiences and training in career fields.<br><br>Sub Component: Student Participation in Program | | |
|---|---|---|
| **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| *A. Students participate in a variety of realistic tasks that reflect authentic participation in the occupation (including entry level/operational tasks) | *A. Students participate in daily tasks appropriate for the internship experience, but may occasionally be placed in the role of an observer while their mentor tends to responsibilities. | A. Students do not participate in tasks that reflect authentic participation in the occupation. |
| B. Student safety is ensured by vetting potential mentors and internship locations. | B. Student safety is a priority for all stakeholders. | B. Students are asked to meet alone with unvetted adults. |
| C. Stakeholders collaborate to find placements that have long-term benefits for students. Program participation exceeds graduation requirements. | C. Stakeholders try to find placements that engage student interests, have short-term benefits for students, or will give students an edge in their post-secondary pursuits. | C. Placement in the program is granted to meet a school requirement neither reflecting student interests nor college/career goals. |
| D. The program has a flexible timeline increasing potential student participation. | D. Some flexibility exists, but students are expected to arrange their schedule to meet the structured timeline of the program. | D. The program timeline is not compatible with student schedules. A lack of flexibility prevents most students from applying. |
| E. The program encourages students to become lifelong learners, innovators, and develop a growth mindset. | E. The program encourages students to take ownership of their choices and develop career-ready skills. | E. Students are advised away from the internship/mentorship program. |

Sub Component: Student Participation in Program-Acceptable Indicators ONLY

All indicators with an average ranking of moderately or strongly endorsed will remain in the implementation map. Those with an average ranking of minimally or not endorsed will be removed.

| | |
|---|---|
| A. Students participate in daily tasks appropriate for the internship experience, but may occasionally be placed in the role of an observer while their mentor tends to responsibilities. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| B. Student safety is a priority for all stakeholders. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| C. Stakeholders try to find placements that engage student interests, have short-term benefits for students, or will give students an edge in their post-secondary pursuits. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| D. Some flexibility exists, but students are expected to arrange their schedule to meet the structured timeline of the program. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| E. The program encourages students to take ownership of their choices and develop career-ready skills. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |

Are there any ideal or unacceptable indicators that you either MINIMALLY or do NOT endorse (would like removed?) Please be specific as to which indicator(s) [EG: A. Ideal, or B. unacceptable]

Any final comments or suggestions for this sub-component?

1. Structured Student Internship/Mentorship Program: Sub Component: Mentors

Sub Component: Mentors Entire Implementation Map for Reference

1. Structured Student Internship/Mentorship Program:
Schools and business partners collaborate to provide students with authentic experiences and training in career fields.

Sub Component: Mentors

| **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
|---|---|---|
| A. Students frequently engage with both their school and business level mentor during their internship placement. The mentor program is structured and well organized. | A. The mentor program is structured and organized providing students with at least one mentor (business or school level). | A. The mentorship program is disorganized. Students do not receive support from a mentor (school or business level) during their internship. |
| B. All mentors have clearly defined roles and responsibilities that are communicated to students. Students have opportunities to provide feedback on the mentoring experience. | B. All mentors are aware of each other's responsibilities. Mentor roles are communicated to students. | B. The roles and responsibilities of mentors are not defined. |
| C. A scheduled timeline for triad meetings (student, business mentor, and school mentor) is established. | C. Meetings between students and their mentors occur (business and/or school level). Mentors reschedule meetings when necessary. | C. There is a lack of communication between students and their mentors (school and business level). |
| *D. Shortcomings of the school and business are regularly and openly discussed to improve the internship/mentorship program. | D. Mentors constructively discuss shortcomings of the school or business with mentees to provide a realistic view of the occupation or preparatory program. | D. Shortcomings of the school or business are discussed in front of student(s) in a derogatory manner. |
| E. Mentors have meaningful discussions about professionalism and job expectations *with* students and model professionalism *to* students. | E. Mentors model professionalism to students and enforce job expectations. | E. Mentors do not model professional behaviors to students or enforce job expectations. |
| F. Mentors volunteer for their role. They are interviewed to verify their commitment to the program and ensure that their motives are student centered. | F. Mentors are selected based on recommendations. They commit to program expectations and remain student-focused. | F. Mentors do not follow through with commitments. Their participation in program is driven by self-interest. |

Sub Component: Mentors- Acceptable Indicators ONLY

All indicators with an average ranking of moderately or strongly endorsed will remain in the implementation map. Those with an average ranking of minimally or not endorsed will be removed.

| | |
|---|---|
| A. The mentor program is structured and organized providing students with at least one mentor (business or school level). | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| B. All mentors are aware of each other's responsibilities. Mentor roles are communicated to students. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| C. Meetings between students and their mentors occur (business and/or school level). Mentors reschedule meetings when necessary. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| D. Mentors constructively discuss shortcomings of the school or business with mentees to provide a realistic view of the occupation or preparatory program. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| E. Mentors model professionalism to students and enforce job expectations. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |

| | |
|---|---|
| F. Mentors are selected based on recommendations. They commit to program expectations and remain student-focused. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |

Are there any ideal or unacceptable indicators that you either MINIMALLY or do NOT endorse (would like removed?) Please be specific as to which indicator(s) [EG: A. Ideal, or B. unacceptable]

Any final comments or suggestions for this sub-component?

2. Acceptable behaviors for- Faculty Externships: Business partners communicate current industry trends, demands, and expectations to schools through faculty externships with business partners

Business partners communicate current industry trends, demands, and expectations to schools through faculty externships with business partners

Sub Component: During Externship Entire Implementation Map for Reference

| **2. Faculty Externships:** Business partners communicate current industry trends, demands, and expectations to schools through faculty externships with business partners<br>Sub Component: During Externship | | |
|---|---|---|
| **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| A. Participants openly share and learn from each other to identify skills and knowledge students need to thrive in a specific industry. They look beyond obvious connections to bring a variety of opportunities to the classroom. | A. Participants share experiences and knowledge with the intent of bringing a better understanding of the industry to the classroom. | A. Stakeholders do not use the experience to build a mutually beneficial partnership. Educators are unwilling to bring new practices from externships to the classroom. |
| B. All stakeholders willing and open to trying new things, engaged, and participate with fidelity. | B. All stakeholders participate and are willing to try new things. | B. Stakeholders' participation lacks commitment and interest. |
| C. Interactions and language between all participants are courteous and complimentary.<br><br>D. Internship program mentors are involved in externships. | C. Interactions between participants are civil and solutions-oriented. | C. Participants are arrogant, non-compliant, and use language that is directed toward discrediting each other.<br><br>D. Internship program mentors are not involved in externships. |
| E. Time to plan and network with business partners is provided in the externship schedule | E. Externship schedule is flexible and allows some time to work with business partners. | E. Time to work or network with business partners is not built into the program; expectation to meet falls after contractual hours. |

Sub Component: During Externship-Acceptable Indicators ONLY

All indicators with an average ranking of moderately or strongly endorsed will remain in the implementation map. Those with an average ranking of minimally or not endorsed will be removed.

| | |
|---|---|
| A. Participants share experiences and knowledge with the intent of bringing a better understanding of the industry to the classroom. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| B. All stakeholders participate and are willing to try new things. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| C. Interactions between participants are civil and solutions-oriented. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| D. Internship program mentors have limited involvement in externships. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| E. Some time to work and network with business partners is embedded in the externship schedule. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |

Are there any ideal or unacceptable indicators that you either MINIMALLY or do NOT endorse (would like removed?) Please be specific as to which indicator(s) [EG: A. Ideal, or B. unacceptable]

Any final comments or suggestions for this sub-component?

2. Faculty Externships: Sub Component: Planning and Preparation

Sub Component: Planning and Preparation Entire Implementation Map for Reference

| **2. Faculty Externships:** Business partners communicate current industry trends, demands, and expectations to schools through faculty externships with business partners<br>Sub Component: Planning and Preparation | | |
|---|---|---|
| **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| A. Co-created outcomes and expectations for externships are clearly communicated to, and agreed upon by, all stakeholders. | A. Intended outcomes are communicated to participants. | A. School leadership does not foster buy-in to the purpose of faculty externships. |
| B. Teacher needs and gaps are communicated to business partners and intermediaries. | B. There is consistent communication between stakeholders. | B. The externship is disorganized, lacking in transparency and communication. |
| C. Adequate time to conduct and debrief externships is embedded in the school calendar. | C. Some time to conduct and debrief externships is embedded in the school calendar. | C. No time is allocated to running or debriefing externships. |
| D. Leaders from businesses and schools collaborate to organize and run externships. | D. Business leaders organize and run externships. | |
| E. Externships relate to multiple career pathways offered by the school and can shift in audience and priority. | E. Externships are aligned with career pathways offered by the school. | E. Externships are not connected to career pathways offered by the school. |

Sub Component: Planning and Preparation-Acceptable Indicators ONLY

All indicators with an average ranking of moderately or strongly endorsed will remain in the implementation map. Those with an average ranking of minimally or not endorsed will be removed.

| | |
|---|---|
| A. Intended outcomes are presented to participants. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| B. There is consistent communication between stakeholders. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| C. Some time to conduct and debrief externships is embedded in the school calendar. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| D. Business leaders organize and run externships. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| E. Externships are aligned with career pathways offered by the school. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |

Are there any ideal or unacceptable indicators that you either MINIMALLY or do NOT endorse (would like removed?) Please be specific as to which indicator(s) [EG: A. Ideal, or B. unacceptable]

Any final comments or suggestions for this sub-component?
Thank you for your Contributions!

To continue to Part B please use this link:
https://forms.gle/HhJLvZCyLrNjDpD39

**Phase 3: Round 3- Part B: Business Collaboration Behaviors**

I am a Hawaiʻi career academy/CTE...
*Select one.*

☐ Teacher
☐ School Leader
☐ Business Partner

Please rank the 'acceptable' indicators according to your level of endorsement.

All indicators with an average ranking of moderately or strongly endorsed will remain in the implementation map. Those with an average ranking of minimally or not endorsed will be removed.

3. Co-Created Career Themed Curriculum: Students engage with a cross-curricular career/industry themed curriculum that is co-created by schools and business partners. The curriculum is problem/project-based and aligned with current industry and community needs as well as academic standards.

Sub Component: Planning and Collaboration Entire Implementation Map for Reference

| **3. Co-Created Career Themed Curriculum:** Students engage with a cross-curricular career/industry themed curriculum co-created by schools and business partners. The curriculum is problem/project-based and aligned with current industry and community needs as well as academic standards.<br><br>Sub Component: Planning and Collaboration | | |
|---|---|---|
| **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| A. Time and resources are provided to collaborate with business partners and create the curriculum.<br><br>C. Planning and collaboration meetings are frequently and consistently scheduled (at least once per month). Stakeholders regularly attend meetings and actively contribute ideas.<br><br>D. Stakeholders use a variety of tools (virtual, email, in-person) to consistently communicate. They are flexible, honest, open-minded, willing to learn, and have an innovative mindset.<br><br>E. Facilitators are identified to advance and motivate the curriculum development process. | A. Some time and resources are provided to collaborate and align curriculum.<br><br>C. Planning and collaboration meetings occur at least once per grading period/quarter. Stakeholders provide feedback but do not always attend meetings.<br><br>D. Stakeholders consistently communicate. Interactions are positive, respectful, and focus on student success.<br><br>E. A leadership structure is in place to facilitate the curriculum development process. | A. Minimal or no time and resources are provided to collaborate about curriculum<br><br>C. Planning and collaboration meetings are neither consistently scheduled nor attended by stakeholders.<br><br>D. There is a lack of communication, collaboration, and follow through.<br><br>E. There is no leadership structure to facilitate curriculum development. |

Sub Component Planning and Collaboration-Acceptable Indicators ONLY

All indicators with an average ranking of moderately or strongly endorsed will remain in the implementation map. Those with an average ranking of minimally or not endorsed will be removed.

| | |
|---|---|
| A. Some time and resources are provided to collaborate and align curriculum. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| C. Planning and collaboration meetings occur at least once per grading period/quarter. Stakeholders provide feedback but do not always attend meetings. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| D. Stakeholders consistently communicate. Interactions are positive, respectful, and focus on student success. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| E. A leadership structure is in place to facilitate the curriculum development process. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |

Are there any ideal or unacceptable indicators that you either MINIMALLY or do NOT endorse (would like removed?) Please be specific as to which indicator(s) [EG: A. Ideal, or B. unacceptable]

Any final comments or suggestions for this sub-component?

3. Co-Created Career Themed Curriculum: Sub Component Stakeholder Contributions

Sub Component: Stakeholder Contributions Entire Implementation Map for Reference

| **3. Co-Created Career Themed Curriculum:** Students engage with a cross-curricular career/industry themed curriculum co-created by schools and business partners. The curriculum is problem/project-based and aligned with current industry and community needs as well as academic standards.<br><br>Sub Component: Stakeholder Contributions | | |
|---|---|---|
| **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| A. All stakeholders are actively involved in and equally contribute to curriculum development. | A. The school leads curriculum development with input and contributions from stakeholders. | A. Stakeholders are siloed in responsibilities and convey one-sided needs or wants. |
| B. Business partners share industry and community specific problems that form the foundation of student projects. Industry expectations, soft skills, and training materials are fully incorporated into the curriculum ensuring contextual teaching and learning scenarios. | B. Business partners support curriculum planning efforts by sharing industry-specific expectations and skills. They provide feedback on ways to increase industry connections and contexts. | B. The curriculum lacks industry integration. It is short-sighted, focusing on obvious connections, stereotypes, and quick wins. |
| C. Business partners understand content standards and make recommendations to update curriculum based on ever-changing industry needs. | C. Educators and business partners agree to curriculum adjustments and updates. | C. Stakeholders are rigid and unwilling to compromise or adjust curriculum to meet each other's needs. |

Sub Component Stakeholder Contributions-Acceptable Indicators ONLY

All indicators with an average ranking of moderately or strongly endorsed will remain in the implementation map. Those with an average ranking of minimally or not endorsed will be removed.

| | |
|---|---|
| A. The school leads curriculum development with input and contributions from stakeholders. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| B. Business partners support curriculum planning efforts by sharing industry-specific expectations and skills. They provide feedback on ways to increase industry connections and contexts. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| C. Educators and business partners agree to curriculum adjustments and updates. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |

Are there any ideal or unacceptable indicators that you either MINIMALLY or do NOT endorse (would like removed?) Please be specific as to which indicator(s) [EG: A. Ideal, or B. unacceptable]

Any final comments or suggestions for this sub-component?

4. Co-develop Employability Skills for Students: School and business partners co-develop employability skills applicable to the academy's industry and ways to evaluate student performance with these skills.

Sub Component: Collaboration and Communication Entire Implementation Map for Reference

| **4. Co-develop Employability Skills for Students:** School and business partners co-develop employability skills applicable to the academy's industry and ways to evaluate student performance with these skills.<br><br>Sub Component: Collaboration and Communication | | |
|---|---|---|
| **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| A. Time and resources are provided so teachers can co-develop employability skills with business partners and develop an authentic curriculum to teach students these skills. | A. Time and resources are provided to teachers for developing employability skills and an associated curriculum. | A. Stakeholders are unwilling to make time to meet and develop employability skills. |
| B. A structured system to gather and discuss input from all stakeholders is developed. | B. Business partners review and provide feedback on the teacher developed employability skills. | B. Schools do not incorporate suggestions from business partners. |
| C. There is frequent communication and active collaboration between all groups. Stakeholders are flexible and open-minded. | C. Stakeholders communicate and collaborate on a regular basis. | C. Stakeholders do not communicate. |
| | D. Stakeholders who cannot attend a meeting contribute virtually/via email or assign a representative to gather information. | |

Sub Component Collaboration and communication-Acceptable Indicators ONLY

All indicators with an average ranking of moderately or strongly endorsed will remain in the implementation map. Those with an average ranking of minimally or not endorsed will be removed.

| | |
|---|---|
| A. Time and resources are provided to teachers for developing employability skills and an associated curriculum. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| B. Business partners review and provide feedback on the teacher developed employability skills. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| C. Stakeholders communicate and collaborate on a regular basis. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| D. Stakeholders who cannot attend a meeting contribute virtually/via email or assign a representative to gather information. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |

Are there any ideal or unacceptable indicators that you either MINIMALLY or do NOT endorse (would like removed?) Please be specific as to which indicator(s) [EG: A. Ideal, or B. unacceptable]

Any final comments or suggestions for this sub-component?

4. Co-develop Employability Skills for Students: Development and Implementation

Sub Component: Development and Implementation Entire Implementation Map for Reference

| **4. Co-develop Employability Skills for Students:** School and business partners co-develop employability skills applicable to the academy's industry and ways to evaluate student performance with these skills.<br><br>Sub Component: Development and Implementation | | |
|---|---|---|
| **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| A. Stakeholders collaborate to develop employability skills that reflect current industry demands. They align with content standards and General Learner Outcomes (GLOs). | A. Employability skills are updated to match industry changes and align with either content standards or GLOs. | A. Skills are selected that do not align with industry demands. |
| B. Stakeholders share an understanding of, and expectations for, implementing employability skills school wide. | B. Stakeholders align understanding of employability skills and plan to implement them school wide. | B. Stakeholder groups do not align expectations and understandings of employability skills. |
| C. Employability skill expectations meet industry appropriate levels to prepare students for post-secondary demands. | C. Employability skill expectations and lessons are developed at high school appropriate levels. | C. Employability skills are not implemented or reinforced in schools. |
| D. Students are provided frequent opportunities to apply and demonstrate proficiency with employability skills. | D. Students have opportunities to practice employability skills. | D. Students are provided little to no opportunities to practice employability skills. |
| E. A rubric is developed with realistic and measurable student result indicators. It is used to provide feedback to students on employability skill performance. | E. Realistic and measurable student result indicators are developed. | E. Students do not receive feedback on ways to improve skills. |
| F. All stakeholders model professionalism to students by following employability expectations. | | F. Stakeholders do not follow employability skills expectations. |

Sub Component Development and Implementation-Acceptable Indicators ONLY

All indicators with an average ranking of moderately or strongly endorsed will remain in the implementation map. Those with an average ranking of minimally or not endorsed will be removed.

| | |
|---|---|
| A. Employability skills are updated to match industry changes and align with either content standards or GLOs. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| B. Stakeholders align understanding of employability skills and plan to implement them school-wide. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| C. Employability skill expectations and lessons are developed at high school appropriate levels. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| D. Students have opportunities to practice employability skills. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| E. Realistic and measurable student result indicators are developed. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |

Are there any ideal or unacceptable indicators that you either MINIMALLY or do NOT endorse (would like removed?) Please be specific as to which indicator(s) [EG: A. Ideal, or B. unacceptable]

Any final comments or suggestions for this sub-component?

5. Work-Based Learning (WBL) Opportunities: Schools and business partners collaborate to provide work-based experiences (guest speaking, capstone courses, mock interviews, etc.) that help students plan and execute their post-high school goals.

Sub Component: WBL Opportunity Development Entire Implementation Map for Reference

| **5. Work-Based Learning Opportunities (WBL):** Schools and business partners collaborate to provide work-based experiences (guest speaking, capstone courses, mock interviews, etc.) that help students plan and execute their post-high school goals.<br><br>Sub Component: WBL Opportunity Development | | |
|---|---|---|
| **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| A. WBL opportunities are clearly rooted in real-world scenarios, communicate ideas that contain social currency, are progressive, and easily implemented and executed. | A. WBL opportunities have real-world implications that consider the school, student and community. | A. The goals/requirements of the opportunity are set to a level that excludes or overwhelms students. |
| B. WBL event is aligned to a career pathway and provides students with opportunities to practice employability skills with industry partners. | B. The WBL event is aligned to a career pathway. | B. WBL event is not aligned to a career pathway. |
| C. WBL opportunities are well organized with clear expectations for participants and a flexible timeline allowing increased student participation. | C. WBL opportunities are organized with clear expectations for participants. Flexibility is constrained by student, school, and community factors. | C. WBL opportunities are disorganized and there is poor communication between facilitators. |
| D. Planned follow-up after the WBL opportunity occurs**.** | D. Limited follow up after the WBL opportunity. | D. There is no follow-up after a WBL opportunity is established/created. |

Sub Component: WBL Opportunity Development-Acceptable Indicators ONLY

All indicators with an average ranking of moderately or strongly endorsed will remain in the implementation map. Those with an average ranking of minimally or not endorsed will be removed.

| | |
|---|---|
| A. WBL opportunities have real-world implications that consider the school, student and community. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| B. The WBL event is aligned to a career pathway. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| C. WBL opportunities are organized with clear expectations for participants. Flexibility is constrained by student, school, and community factors. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| D. Limited follow up after the WBL opportunity. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |

Are there any ideal or unacceptable indicators that you either MINIMALLY or do NOT endorse (would like removed?) Please be specific as to which indicator(s) [EG: A. Ideal, or B. unacceptable]

Any final comments or suggestions for this sub-component?

5. Work-Based Learning (WBL) Opportunities: Sub Component Stakeholder Involvement

Sub Component: Stakeholder Involvement Entire Implementation Map for Reference

| **5. Work-Based Learning Opportunities:** Schools and business partners collaborate to provide work-based experiences (guest speaking, capstone courses, mock interviews, etc.) that help students plan and execute their post-high school goals.<br><br>Sub Component: Stakeholder Involvement | | |
|---|---|---|
| **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| A. The WBL opportunity is a collaborative effort where all stakeholders have a clear return on investment. | A. Collaborators are committed to and invested in the partnership. | A. Stakeholders do not build on the business relationship to create a mutually beneficial partnership. |
| B. Stakeholders have strong communication, commitment, and consistently schedule meeting times. | B. There is strong communication between stakeholders. Businesses communicate with schools when they cannot attend a scheduled WBL event. | B. Stakeholder groups do not support each other or communicate. |
| C. Schools and business partners select strong intermediaries to support the partnership structure. | | C. Stakeholders do not use the WBL experience to create a partnership that will benefit students. |
| D. All stakeholders receive DOE regulation training on WBL site safety. | D. A plan for safety trainings are established | D. DOE safety regulations and protocols are not considered nor followed. |

Sub Component: Stakeholder Involvement-Acceptable Indicators ONLY

All indicators with an average ranking of moderately or strongly endorsed will remain in the implementation map. Those with an average ranking of minimally or not endorsed will be removed.

| | |
|---|---|
| A. Collaborators are committed to and invested in the partnership. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| B. There is strong communication between stakeholders. Businesses communicate with schools when they cannot attend a scheduled WBL event. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| D. A plan for safety trainings are established. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |

Are there any ideal or unacceptable indicators that you either MINIMALLY or do NOT endorse (would like removed?) Please be specific as to which indicator(s) [EG: A. Ideal, or B. unacceptable]

Any final comments or suggestions for this sub-component?

5. Work-Based Learning (WBL) Opportunities: Sub Component Student Interactions

Sub Component: Student Interactions Entire Implementation Map for Reference

| **5. Work-Based Learning Opportunities:** Schools and business partners collaborate to provide work-based experiences (guest speaking, capstone courses, mock interviews, etc.) that help students plan and execute their post-high school goals. | | |
|---|---|---|
| Sub Component: Student Interactions | | |
| **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| A. Stakeholders show enthusiasm in working with students. | A. Stakeholders have positive attitudes and interactions with students. | A. Facilitators lack passion, are uninspiring, or have a negative attitude about their career. |
| B. Stakeholders collaborate to ensure students are prepared for participation in the WBL opportunities. | B. Stakeholders understand the benefits of collaborating to prepare students for WBL opportunities. | B. No time is allocated to prepare or support students for success with WBL opportunities. |
| C. Educators and business partners share in their understanding for the WBL event and how participation will benefit students. These understandings are communicated to students. | C. Educators discuss WBL events with students to provide deeper understanding of the experience. | C. Stakeholders promote a trivial attitude in students by understating the importance of WBL experiences. |

Sub Component: Student Interactions -Acceptable Indicators ONLY

All indicators with an average ranking of moderately or strongly endorsed will remain in the implementation map. Those with an average ranking of minimally or not endorsed will be removed.

| | |
|---|---|
| A. Stakeholders have positive attitudes and interactions with students. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| B. Stakeholders understand the benefits of collaborating to prepare students for WBL opportunities. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| C. Educators discuss WBL events with students to provide deeper understanding of the experience. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |

Are there any ideal or unacceptable indicators that you either MINIMALLY or do NOT endorse (would like removed?) Please be specific as to which indicator(s) [EG: A. Ideal, or B. unacceptable]

Any final comments or suggestions for this sub-component?

Thank you for your Contributions!
To continue to Part C please use this link: https://forms.gle/TzwagRt88rs7x5aq9

**Phase 3: Round 3- Part C: Business Collaboration Behaviors**

I am a Hawaiʻi career academy/CTE...
*Select one.*

☐ Teacher
☐ School Leader
☐ Business Partner

Please rank the 'acceptable' indicators according to your level of endorsement.

All indicators with an average ranking of moderately or strongly endorsed will remain in the implementation map. Those with an average ranking of minimally or not endorsed will be removed.

6. Students Participate in Business Partner Events: Students are offered service or volunteer opportunities at business partner events (job fairs, beach clean-ups, family fairs, etc.).

Sub Component: Stakeholder Roles Entire Implementation Map for Reference

| **6. Students participate in business partner events:** Students are offered service or volunteer opportunities at business partner events (job fairs, beach clean-ups, family fairs, etc.). | | |
|---|---|---|
| Sub Component: Stakeholder Roles | | |
| **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| A. Stakeholders collaborate to provide multiple, diverse volunteer experiences for students at business partner events. | A. Stakeholders plan some volunteer experiences for students at business partner events. | A. Stakeholders do not attempt to plan and organize volunteer experiences for students at business partner events. |
| C. Business partners connect and follow up with students to include them in official business events or internship opportunities. | C. Business partners offer a sign-in sheet for student participants and attempt to follow up with students. | C. There is a lack of follow-up with students after the event. |
| D. Business partners actively recruit student volunteers and adults welcome students at events. | D. Businesses partners are open to including minors in events.<br><br>E. Lead by example through sincere participation in events. | |
| F. Stakeholders lead by example through sincere participation in events and show enthusiasm when working with students. Student internship mentors get involved in events and invite/include mentees. | F. Stakeholders, including student mentors, lead by example at events and encourage students to become involved with events. | F. Stakeholders and student mentors do not exhibit the behaviors expected of students. Business partner event opportunities are not communicated to students. |

Sub Component: Stakeholder Roles-Acceptable Indicators ONLY

All indicators with an average ranking of moderately or strongly endorsed will remain in the implementation map. Those with an average ranking of minimally or not endorsed will be removed.

| | |
|---|---|
| A. Stakeholders plan some volunteer experiences for students at business partner events. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| C. Business partners offer a sign-in sheet for student participants and attempt to follow up with students. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| D. Business partners are open to including minors in events. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| E. Lead by example through sincere participation in events. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| F. Stakeholders, including student mentors, lead by example at events and encourage students to become involved with events. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |

Are there any ideal or unacceptable indicators that you either MINIMALLY or do NOT endorse (would like removed?) Please be specific as to which indicator(s) [EG: A. Ideal, or B. unacceptable]

Any final comments or suggestions for this sub-component?

6. Students Participate in Business Partner Events: Sub Component Preparing Students

Sub Component: Preparing Students Entire Implementation Map for Reference

| **6. Students participate in business partner events:** Students are offered service or volunteer opportunities at business partner events (job fairs, beach clean-ups, family fairs, etc.). | | |
|---|---|---|
| Sub Component: Preparing Students | | |
| **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| A. Students are able to express the connection between the business partner event and their future workforce goals. | A. Stakeholders communicate the connections between the event and workforce needs to students. | A. Students are unaware of the connection between the event and workforce needs. |
| B. Employability skills are used to create clear adult interaction guidelines, objectives, and expectations for students. | B. Students are expected to demonstrate proficiency with employability skills while volunteering at business partner events. | B. Value is placed on perfection over progress regarding student performance. |
| C. Prior to event, all students are prepared with strategies that will help them rise above their comfort zone and connect with individuals at events. | C. Prior to an event, shy/reluctant students are prepared to interact with adults and encouraged to venture outside of their comfort zone. | **C/D.** No assistance or planning is provided to help students prepare for an event. |
| D. Before an event, teachers share guest lists with students and help them decide who to seek out at the event. | D. Teachers are available and accessible for students during events. | |

Sub Component Preparing Students-Acceptable Indicators ONLY

All indicators with an average ranking of moderately or strongly endorsed will remain in the implementation map. Those with an average ranking of minimally or not endorsed will be removed.

| | |
|---|---|
| A. Stakeholders communicate the connections between the event and workforce needs to students. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| B. Students are expected to demonstrate proficiency with employability skills while volunteering at business partner events. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| C. Prior to an event, shy/reluctant students are prepared to interact with adults and encouraged to venture outside of their comfort zone. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| D. Teachers are available and accessible for students during events. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |

Are there any ideal or unacceptable indicators that you either MINIMALLY or do NOT endorse (would like removed?) Please be specific as to which indicator(s) [EG: A. Ideal, or B. unacceptable]

Any final comments or suggestions for this sub-component?

7. Shared Vision for Partnership: Schools and business partners define outcomes, parameters, and purposes for the partnership.

Sub Component: Establishing Vision Entire Implementation Map for Reference

| **7. Shared Vision for Partnership:** Schools and business partners define outcomes, parameters, and purposes for the partnership<br><br>Sub Component: Establishing Vision | | |
|---|---|---|
| **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| A. All stakeholders are provided with time and resources to collaborate and establish a shared vision for the **partnership**. | A. Teachers and industry partners have opportunities to develop a vision to communicate the focus of the **partnership**. | A. There is little to no effort given to establishing a shared vision for the **partnership.** |
| B. There is open and consistent communication between all groups, allowing for constructive criticism. Stakeholders are flexible and willing to compromise. | B. Communication occurs regularly and is mostly positive. Stakeholders are willing to adjust their perspective and commit to the vision for the benefit of students. | B. There is a lack of communication and collaboration. Stakeholders are not willing to compromise, explore new options, and are narrow-minded in scope. |
| C. A regular meeting schedule with structured agendas is established. If a stakeholder cannot attend a meeting, they will select a temporary representative. | C. Set meeting times, plus an agenda and outcomes, are communicated to stakeholders. | C. Meetings are ad hoc poorly attended, and lack a set agenda. |
| D. The shared vision for the partnership aligns with both the career academy's vision and business partners' vision. | D. The shared vision for the partnership aligns with the career academy's vision. | D. The shared vision is not clearly aligned to the academy or business's visions. |

Sub Component: Establishing Vision - Acceptable Indicators ONLY

All indicators with an average ranking of moderately or strongly endorsed will remain in the implementation map. Those with an average ranking of minimally or not endorsed will be removed.

| | |
|---|---|
| A. Teachers and industry partners have opportunities to develop a vision to communicate the focus of the partnership. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| B. Communication occurs regularly and is mostly positive. Stakeholders are willing to adjust their perspective and commit to the vision for the benefit of students. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| C. Set meeting times, plus an agenda and outcomes, are communicated to stakeholders. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| D. The shared vision for the partnership aligns with the career academy's vision. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |

Are there any ideal or unacceptable indicators that you either MINIMALLY or do NOT endorse (would like removed?) Please be specific as to which indicator(s) [EG: A. Ideal, or B. unacceptable]

Any final comments or suggestions for this sub-component?

7. Shared Vision for Partnership: Sub Component Vision Application

Sub Component: Vision Application Entire Implementation Map for Reference

| **7. Shared Vision for Partnership:** Schools and business partners define outcomes, parameters, and purposes for the partnership.<br><br>Sub Component: Vision Application | | |
|---|---|---|
| **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| A. Students reflect on how shared vision plays a role in their development.<br><br>B. There is commitment to the common vision.<br><br>C. All stakeholders are very familiar with the vision and use it as a lens to focus important partnership issues.<br><br>D. Stakeholders seamlessly incorporate the vision into projects. Students know and use the vision to develop goals. | A. Students are aware of the vision for the partnership.<br><br>B. There is commitment to an established vision.<br><br>C. Relationships built between stakeholders are focused on the internship program and may be limited in scope.<br><br>D. Teachers and business partners can access the vision and use it as a lens to guide projects and develop goals for students. | A/B Stakeholders, including students, do not know the vision.<br><br>C. Stakeholders do not build on partnerships to create a mutually beneficial plan for students.<br><br>D. Educators conduct teaching methods that ignore or disregard the shared vision. |

Sub Component Vision Application-Acceptable Indicators ONLY

All indicators with an average ranking of moderately or strongly endorsed will remain in the implementation map. Those with an average ranking of minimally or not endorsed will be removed.

| | |
|---|---|
| A. Students are aware of the vision for the partnership. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| B. There is commitment to an established vision. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| C. Relationships built between stakeholders are focused on the internship program and may be limited in scope. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| D. Teachers and business partners can access the vision and use it as a lens to guide projects and develop goals for students. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |

Are there any ideal or unacceptable indicators that you either MINIMALLY or do NOT endorse (would like removed?) Please be specific as to which indicator(s) [EG: A. Ideal, or B. unacceptable]

Any final comments or suggestions for this sub-component?

8. Academy Advisory Boards: Stakeholders form advisory boards to develop or evolve career academies and pathways that reflect current industry trends and school needs.

Sub Component: Member Roles Entire Implementation Map for Reference

| 8. Academy Advisory Boards: Stakeholders form advisory boards to develop or evolve career academies and pathways that reflect current industry trends and school needs.<br><br>Sub Component: Member Roles | | |
|---|---|---|
| **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| A. The advisory board has more than one established representative from each of the following: teachers, school leaders, business partners, students, parents, and community members. New voices are welcomed at the table. | A. Stakeholders are willing to be board members OR an active participant if they cannot serve on the board. | A. Stakeholders do not make time to be involved with the advisory board. |
| B. Board members and participants share current industry trends and propose career pathway evolutions to meet these trends. | B. Advisory board members and participants suggest the best pathways to start and or take to enter a career. | B. There is no buy-in from the industry. Participants want to adhere to the status quo regarding educational practices. |
| C. Board members and participants are committed and participate at meetings. They are flexible and willing to meet later in the day to ensure regular attendance. | C. Most board members and participants regularly attend and participate in meetings though there are no expectations to meet beyond the scope of the work day. | C. There is a lack of attendance and participation from stakeholders at planned meetings. |
| D. Stakeholders follow-through with commitments and assigned tasks. | D. Stakeholders communicate and request support to ensure follow-through with commitments and assigned tasks. | D. There is no follow-through by stakeholders |

Sub Component Member Roles-Acceptable Indicators ONLY

All indicators with an average ranking of moderately or strongly endorsed will remain in the implementation map. Those with an average ranking of minimally or not endorsed will be removed.

| | |
|---|---|
| A. Stakeholders are willing to be board members OR an active participant if they cannot serve on the board. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| B. Advisory board members and participants suggest the best pathways to start and or take to enter a career. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| C. Most board members and participants regularly attend and participate in meetings though there are no expectations to meet beyond the scope of the workday. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| D. Stakeholders communicate and request support to ensure follow-through with commitments and assigned tasks. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |

Are there any ideal or unacceptable indicators that you either MINIMALLY or do NOT endorse (would like removed?) Please be specific as to which indicator(s) [EG: A. Ideal, or B. unacceptable]

Any final comments or suggestions for this sub-component?

8. Academy Advisory Boards: Sub Component Communication and Relationships

Sub Component: Communication and Relationships Entire Implementation Map for Reference

| **8. Academy Advisory Boards:** Stakeholders form advisory boards to develop or evolve career academies and pathways that reflect current industry trends and school needs.<br><br>Sub Component: Communication and Relationships | | |
|---|---|---|
| **Ideal Behaviors** | **Acceptable Behaviors** | **Unacceptable Behaviors** |
| A. Schools create strong, positive relationships with business partners. Educators and students get involved with industry events to expand college and career opportunities. | A. Stakeholders build positive relationships to create opportunities for students, though there may be limited effort made to expand program offerings. | A. Stakeholders do not build on the business relationship to create a mutually beneficial partnership or a plan that will benefit students. |
| B. Time and resources are provided to establish academy advisory boards through organized, consistent, and structured collaboration meetings. | B. Some time and resources are allocated for stakeholders to meet and establish academy advisory boards. | B. Little to no resources are allotted to support the establishing advisory boards. |
| C. Meeting agendas are shared prior to each meeting, clearly and consistently communicating the purpose and outcomes for each meeting. | C. The purpose of and for meetings is communicated to members and participants. | C. There is poor communication between stakeholders. Few know the purpose of and for meetings. |
| D. Stakeholders show enthusiasm when working with students. | D. Stakeholders have a positive attitude and work well with students. | D. Participants have an attitude of entitlement and disrespect. |

Sub Component Communication and Relationships-Acceptable Indicators ONLY

All indicators with an average ranking of moderately or strongly endorsed will remain in the implementation map. Those with an average ranking of minimally or not endorsed will be removed.

| | |
|---|---|
| A. Stakeholders build positive relationships to create opportunities for students, though there may be limited effort made to expand program offerings. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| B. Some time and resources are allocated for stakeholders to meet and establish academy advisory boards. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| C. The purpose of and for meetings is communicated to members and participants. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |
| D. Stakeholders have a positive attitude and work well with students. | ☐ I **do not** endorse this statement.<br>☐ I **minimally** endorse this statement.<br>☐ I **moderately** endorse this statement.<br>☐ I **strongly** endorse this statement. |

Are there any ideal or unacceptable indicators that you either MINIMALLY or do NOT endorse (would like removed?) Please be specific as to which indicator(s) [EG: A. Ideal, or B. unacceptable]

Any final comments or suggestions for this sub-component?

This concludes Phase 3 Round 3! Thank you so much for your continued support and dedication

Appendix G: Evolution of Behavioral Variations for Structured Student Internship/Mentorship Program: Subcomponent Collaboration

**Table G1**

*Ideal Behaviors-Structured Student Internship/Mentorship Program: Subcomponent Collaboration*

| R1 Brainstorming | R3 Strong/ moderate % | P3 Revisions | P3 Strong/ moderate % |
|---|---|---|---|
| 1a. Strong collaborative relationship between business partners and schools. | 100* | 1. Strong collaborative relationships between business partners and schools are fostered by defining a working relationship and trusting in each other's intent. | 100 |
| 1b. Foster collaboration by defining a working relationship. | 100 | Combine with #1a. | --- |
| 1c. Trust in each other's intent. | 90.1 | Combine with #1a. | --- |
| 2a. Commitment to the decided plan whether or not in total agreement. *Round 2 revision*: Commitment to the decided plan whether or not in total consensus. | 91 | 2. Stakeholders are committed to an agreed-upon plan whether or not they are in total consensus. They take accountability and follow through with agreements. | 100 |
| 2b. Accountable for identified responsibilities. *Round 2 revision*: Takes accountability and follows through with identified responsibilities. | 91 | Combine with #2a. | --- |
| 3. Developed in Phase 3. | --- | 3. Business partners and school personnel regularly collaborate to approve and arrange student internships/ mentorship opportunities. | 100 |

*Indicates behavior that was strongly endorsed by all participants

**Table G2**

*Unacceptable Behaviors-Structured Student Internship/Mentorship Program:Subcomponent Collaboration*

| R1 Brainstorming | R3 Strong/ moderate % | P3 Revisions | P3 Strong/ moderate % |
|---|---|---|---|
| 1a. Skepticism of each other's intent. | 90 | 1. Stakeholders are skeptical of each other's intent and induce toxic conflict. | 100 |
| 1b. Toxic conflict. | 90 | Combined with #1a. | --- |
| 2a. Unwilling to compromise. | 90 | 2. Stakeholders are unwilling to compromise and lack commitment to a plan. They do not follow through with identified responsibilities and agreements. | 100 |
| 2b. Lack of commitment to agreed-upon plan. | 100 | Combined with #2a. | --- |
| 3. Arrangements for internships/mentorships are made without either business partner or school knowledge/approval. | 100 | 3. N/A | 100 |

**Table G3**

*Acceptable Behaviors: Student Internship/Mentorship Program-Collaboration Subcomponent*

| R1 Brainstorming: | R2 Revised | R3 Strong/ moderate % |
|---|---|---|
| 1. Collaborative relationships are established through open and consistent communication. Stakeholders use disagreements as an opportunity to determine working structures and strengthen the relationship | 1. Collaborative relationships are established through open and consistent communication. Stakeholders use disagreements as an opportunity to determine working structures for the partnership. | 100 |
| 2. Stakeholders are willing to compromise and accept the agreed-upon plan though concerns or disagreements with portions are expressed. They are held accountable to following through with agreements and identified responsibilities. | 2. Stakeholders are willing to compromise and accept a decided plan though concerns or disagreements with portions are expressed. They are held accountable for following through with agreements. | 75 |
| 3. Developed in Phase 3. | 3. Schools initiate internship/mentorship opportunities as the need arises. Student participation occurs with both business partners and school knowledge/approval. | 75 |

Appendix H: Evolution of Behavioral Variations for Structured Student Internship/Mentorship Program: Subcomponent Communication

**Table H1**

*Ideal Behaviors: Structured Student Internship/Mentorship Program-Subcomponent Cmmunication*

| R1 Brainstorming | R3 Strong/ moderate % | P3 Revisions | P3 Strong/ moderate % |
|---|---|---|---|
| 1a. Create a common language and terminology. | 91 | 1. Common language and terminology are created to foster regular and consistent communication between stakeholders. | 100 |
| 1b. Regular and consistent communication between stakeholders. | 100 | Combined with #1a. | --- |
| 2a. Student-centered discussions that focus on realistic expectations and outcomes for students. | 91 | 2. Discussions are student-centered focusing on realistic expectations and outcomes for students. Expectations for the program are clearly communicated to students. | 100 |
| 2b. Expectations for program are clearly communicated to students. | 100* | Combined with #2a. | --- |
| 3. Open-minded discussions of all ideas and issues occur with room for respectful, constructive conflict. | 91 | 3. N/A | 100 |
| 4. Developed in P3. | --- | 4. Student growth is analyzed and discussed regularly. These discussions drive decisions about changes to student placement in the program. | 100 |

*Indicates behavior that was strongly endorsed by all participants

**Table H2**

*Unacceptable Behaviors: Student Internship/Mentorship Program-Communication Subcomponent*

| R1 Brainstorming | R3 Strong/ moderate % | P3 Revisions | P3 Strong/ moderate % |
|---|---|---|---|
| 1. Lack of prompt, efficient, and open communication. | 100 | 1. Communication is neither prompt nor efficient. The lack of a common language and terminology causes miscommunication and misunderstandings. | 100 |
| 2. Retention of ideas and issues occur as a result of passive-aggressiveness. | 82 | 2. N/A | 100 |
| 3. Decisions are not student-centered. | 100 | 3. Decisions are not student-centered. Students are unaware of program expectations. | 100 |
| 4. No communication about student growth or changes to student placement. | 90 | 4. There is no communication about student growth or changes to student placement in the program. | 100 |

**Table H3**

*Acceptable Behaviors: Student Internship/Mentorship Program-Communication Subcomponent*

| R1: Brainstorming | R2: Revisions | R3 Strong/ moderate % |
|---|---|---|
| 1a. Communication between stakeholders is fairly consistent though some assumptions of understandings are made. If a stakeholder is unable/unwilling to communicate, the organization selects a temporary substitute/replacement. | 1. Common language and terminology are outlined as the need arises. Regular communication between stakeholders occurs. | 75 |
| 1b. A common language and terminology are outlined as the need arises. | Combine with #1a | --- |
| 2. Stakeholders can agree to disagree and reach common ground. | 2. N/A | 88 |
| 3a. Decisions made are student-centered but may require more communication to determine the feasibility of student outcomes. | 3. Outcomes are developed through student-centered discussions, but their feasibility is untested. Program expectations are shared with students. | 75 |
| 3b. Expectations for the program are clearly communicated. | Combine with #3a | --- |
| 4. Developed in Round 2. | 4. Stakeholders have opportunities to discuss student growth. Student growth is a factor when determining potential changes to student placement in the program. | 75 |

# Appendix I: Evolution of Behavioral Variations for Structured Student Internship/Mentorship Program: Application Process

**Table I1**

*Ideal Behaviors: Structured Student Internship/Mentorship Program- Subcomponent Application Process*

| R1 Brainstorming | P3 Revisions | P3 Strong/ moderate % |
|---|---|---|
| 1. Application process to identify students for mentorship/ internship program. | 1. A well-organized application process that identifies students for mentorship/ internship program is developed. | 100 |
| 2. Require students to self-advocate demonstrating their dedication, responsibility, and endurance to complete a mentorship/ internship assignment. | 2. The application process requires students to self-advocate demonstrating their dedication, responsibility, and endurance to complete an internship/ mentorship assignment. | 100 |
| 3. Students allowed to apply to a specific mentorship/internship location. | 3. Students can apply to a specific mentorship/ internship location. | 100 |
| 4. Developed in Phase 3. | 4. Schools and business partners work to proactively answer questions. Stakeholders are encouraged to ask questions and supply feedback about the program prior to application submission. | 100 |

**Table I2**

*Unacceptable Behaviors-Student Internship/Mentorship Program: Applicaiton Process*

| R1 Brainstorming | P3 Revisions | P3 Strong/ moderate % |
|---|---|---|
| 1. Mentorship/ internship application process is disorganized. | 1. The application process is disorganized. | 100 |
| 2. Developed in Phase 3. | 2. The application is not easily accessible to students. It does not communicate the expectation that students self-advocate or commit to completing the internship/mentorship assignment. | 100 |
| 3. Student does not get to choose the location of the internship. | 3. Removed in Phase 2 Round 3. | --- |
| 4. Developed in Phase 3. | 4. Students and parents/guardians are discouraged from asking questions about the program and recieve little or no help from stakeholders. | 100 |
| 5. Student is selected for placement based on familial connections and politicking. | 5. Removed in Phase 2 Round 3. | --- |

**Table I3**

*Acceptable Behaviors-Student Internship/Mentorship Program: Application Process*

| R1: Brainstorming | R2: Revisions | R3 Strong/ moderate % |
|---|---|---|
| 1. An application process is in place but needs refinement. | 1. N/A | 75 |
| 2. The application process is easily accessible to students who are able to self-advocate and expresses the expectation for students to commit for a specified time frame in order to complete the internship | 2. The application process is easily accessible to students who are able to self-advocate. The application expresses the expectation that students commit for a specified time frame to complete the internship/ mentorship assignment. | 88 |
| 3. Expectations for the program are shared with students and students can state their preference for specific mentorship/internship locations. | 3. Students can state their preferences for specific mentorship/internship locations. | 100 |
| 4. Students and parents/guardians are allowed to ask questions about the proposed program prior to application submission | 4. N/A | 100* |

*Indicates behavior that was strongly endorsed by all participants

Appendix J: Evolution of Behavioral Variations for Structured Student Internship/Mentorship Program: Student Participation in Program

**Table J1**

*Ideal Behaviors: Structured Student Internship/Mentorship Program- Subcomponent Student Participantion in Program*

| R1 Brainstorming | P3 Revisions | P3 Strong/ moderate % |
|---|---|---|
| 1. Developed in Phase 3. | 1. Students participate in a variety of realistic tasks that reflect authentic participation in the occupation (including entry level/operational tasks) | 100 |
| 2. Safety of students is ensured by vetting potential mentors and internship locations. | 2. N/A | 100 |
| 3. Stakeholders collaborate to find internships that have long-term benefits for students: not just graduation requirement. | 3. Stakeholders collaborate to find internships that have long-term benefits for students. Program participation exceeds graduation requierments. | 100 |
| 4. Flexibility in timeline/ability for students to participate. | 4. The program has a flexible timeline incrasing potential student participation. | 100 |
| 5a. Lifelong learner. | 5. Program encourages students to become lifelong learners, innovators and develop a growth mindset. | 100 |
| 5b. Growth mindset. | Combined with #5a. | --- |

*Indicates behavior that was strongly endorsed by all participants

**Table J2**

*Unacceptable Behaviors-Student Internship/Mentorship Program: Student Participation in Program*

| R1 Brainstorming | P3 Revisions | P3 Strong/ moderate % |
|---|---|---|
| 1. Students are relegated to menial tasks that do not reflect authentic participation in the occupation. | 1. Students do not participate in tasks that reflect authentic participation in the occupation. | 100 |
| 2. *Developed in R2*: Students are asked to meet alone with unvetted adults. | 2. N/A | 100 |
| 3. Placement is granted to meet a school requirement, not reflect student interest or college/career goals | 3. Placement in the program is granted to meet a school requirement neither reflecting student interests nor college/career goals. | 100 |
| 4. Developed in Phase 3. | 4. The program timeline is not compatible with student schedules. A lack of flexibility prevents most students from applying. | 100 |
| 5. Students are advised away from internship/mentorship program. | 5. N/A | 100 |
| 6. Business partners refuse students for reasons other than behavior or safety concerns. | 6. Removed in Phase 2 Round 3. | --- |

**Table J3**

*Acceptable Behaviors-Student Internship/Mentorship Program: Student Participation in Program*

| R1: Brainstorming | R2: Revisions | R3 Strong/ moderate % |
|---|---|---|
| 1a. A. Students participate in daily tasks appropriate for the internship experience. | 1. Students participate in daily tasks appropriate for the internship experience, but may occasionally be placed in the role of an observer while their mentor tends to responsibilities. | 86 |
| 1b. Student is occasionally placed in the role of an observer while the mentor must tend to their responsibilities | Combined with 1a. | |
| 2. Student safety is a priority for all stakeholders. | 2. N/A | 100* |
| 3. Stakeholders try to find placements that engage student interests, have short-term benefits for students, or will give students an edge in their post-secondary pursuits. | 3. N/A | 100* |
| 4. Some flexibility exists, but students are expected to arrange their schedule to meet the structured timeline of the program. | 4. N/A | 100 |
| 5. Developed in Round 2. | 5. The program encourages students to take ownership of their choices and develop career-ready skills. | 100 |

*Indicates behavior that was strongly endorsed by all participants

# Appendix K: Evolution of Behavioral Variations for Structured Student Internship/Mentorship Program: Subcomponent Mentors

**Table K1**

*Ideal Behaviors: Structured Student Internship/Mentorship Program- Subcomponent Mentors*

| R1 Brainstorming | P3 Revisions | P3 Strong/ moderate % |
|---|---|---|
| 1. Program is structured and well organized. *R2 Revision* Mentorship program is structured and well organized. | 1. Students frequently engage with both their school and business level mentor during their internship placement. The mentor program is structured and well organized. | 100 |
| 2. Clearly defined roles and responsibilities for school and business level mentors. | 2. All mentors have clearly defined roles and responsibilities that are communicated to students. Students have opportunities to provide feedback on the mentoring experience. | 100 |
| 3. Scheduled timeline for meetings between student and their mentors (business and school level). | 3. A scheduled timeline for triad meetings (student, business mentor, and school mentor) is established. | 100 |
| 4. Developed in Phase 3. | 4. Shortcomings of the school and business are regularly and openly discussed to improve the internship/ mentorship program. | 100 |
| 5. Discuss aspects of professionalism with students and model professionalism to students. | 5. Mentors have meaningful discussions about professionalism and job expectations with students and model professionalism to students. | 100 |
| 6. Developed in Phase 3. | 6. Mentors volunteer for their role. They are interviewed to verify their commitment to the program and ensure that their motives are student centered. | 100 |

*Indicates behavior that was strongly endorsed by all participants

**Table K2**

*Unacceptable Behaviors: Structured Student Internship/Mentorship Program-Subcomponent Mentors*

| R1 Brainstorming | P3 Revisions | P3 Strong/ moderate % |
|---|---|---|
| 1. Students so not receive support from their mentors. | 1. The mentorship program is disorganized. Students do not receive support from a mentor (school or business level) during their internship. | 100 |
| 2. Developed in P3. | 2. The roles and responsibilities of mentors are not defined. | 100 |
| 3. Lack of communication between school and business level mentors. | 3. There is a lack of communication between students and their mentors (school and business level). | 100 |
| 4. Shortcomings of school or business discussed in front of student(s). | 4. Shortcomings of the school or business are discussed in front of student(s) in a derogatory manner. | 100 |
| 5. Developed in P3. | 5. Mentors do not model professional behaviors to students or enforce job expectations. | 100 |
| 6. Developed in P3. | 6. Mentors do not follow through with commitments. Their participation in program is driven by self-interest. | 100 |

**Table K3**

*Acceptable Behaviors-Student Internship/Mentorship Program: Mentors*

| R1: Brainstorming | R2: Revisions | R3 Strong/ moderate % |
|---|---|---|
| 1. The mentorship program is structured and organized. | 1. The mentor program is structured and organized providing students with at least one mentor (business or school level). | 100 |
| 2. All mentors are aware of each other's responsibilities. Mentor roles are communicated to students. | 2. N/A | 100 |
| 3. Meetings between students and their mentors occur (business and/or school level). Mentors reschedule meetings when necessary. | 3. N/A | 100* |
| 4. Mentors may constructively discuss shortcomings of the school or business to provide a realistic view of the occupation or preparatory program | 4. Mentors constructively discuss shortcomings of the school or business with mentees to provide a realistic view of the occupation or preparatory program. | 100 |
| 5. Mentors model professionalism to students and enforce job expectations. | 5. N/A | 100* |
| 6. Developed in Round 2. | 6. Mentors are selected based on recommendations. They commit to program expectations and remain student-focused. | 100 |

*Indicates behavior that was strongly endorsed by all participants

# Appendix L: Evolution of Behavioral Variations for Faculty Externships: During Externship

**Table L1**

*Ideal Behaviors: Faculty Externships- Subcomponent During Externship*

| R1 Brainstorming | R3 Strong/ moderate % | P3 Revisions | P3 Strong/ moderate % |
|---|---|---|---|
| 1a. Stakeholders identify skills and knowledge students need to thrive in a specific industry. | 100* | 1. Participants openly share and learn from each other's experiences and knowledge identifying skills and knowledge students need to thrive in a specific industry. They look beyond obvious connections and see more nuanced opportunities. | 100 |
| 1b. School and business level participants openly share and learn from each other's experiences and knowledge. | 100* | Combine with #1a. | --- |
| 1c. Look beyond obvious connections and see the more nuanced opportunities. | 90 | Combine with #1a. | --- |
| 2a. Participants are willing and open to trying new things. | 100* | 2. All stakeholders are willing and open to trying new things, engaged, and participate with fidelity. | 100 |
| 2b. All stakeholders are engaged and participate with fidelity. | 100 | Combine with #2a. | --- |
| 3. Interactions and language between all participants are courteous and complementary. | 100 | 3. N/A | 100 |
| 4. Mentors are involved in externships. | 90 | 4. Internship program mentors are involved in externships. | 100 |

| R1 Brainstorming | R3 Strong/ moderate % | 5. P3 Revisions | P3 Strong/ moderate % |
|---|---|---|---|
| 5. Time to network with business partners. | 100 | 6. Time to plan and network with business partners is provided in the externship schedule. | 100 |

*Indicates behavior that was strongly endorsed by all participants

**Table L2**

*Unacceptable Behaviors: Faculty Externships- Subcomponent During Externship*

| R1 Brainstorming | R3 Strong/ moderate % | P3 Revisions | P3 Strong/ moderate % |
|---|---|---|---|
| 1a. Not building on the business relationship to create a mutually beneficial partnership. | 90 | 1. Stakeholders do not use the experience to build a mutually beneficial partnership. Educators are unwilling to bring new practices from externships to the classroom. | 100 |
| 1b. Unwilling to bring new practices or externship experiences to the classroom. | 90 | Combined with 1a. | --- |
| 2. Lack of commitment, interest, and participation by participants. | 100 | 2. Stakeholders' participation lacks commitment and interest. | 100 |
| 3a. Participants are arrogant and non-compliant. | 100 | 3. Participants are arrogant, non-compliant, and use language that is directed toward discrediting each other. | 100 |
| 3b. Language directed toward discrediting each other. | 90 | Combined with 3a. | --- |
| 4. Mentors are not involved in externships. | 82 | 4. Internship program mentors are not involved in externships. | 100 |
| 5. Developed in P3. | --- | 5. Time to work or network with business partners is not built into the program; expectation to meet falls after contractual hours. | 100 |

**Table L3**

*Acceptable Behaviors-Facutly Externships: During Externship*

| R1: Brainstorming | R2: Revisions | R3 Strong/ moderate % |
|---|---|---|
| 1. Participants respectfully share experiences and knowledge with the intent of brining a better understanding of the industry to the classroom. | 1. Participants share experiences and knowledge with the intent of bringing a better understanding of the industry to the classroom. | 100 |
| 2. All stakeholders participate and are willing to try new things. | 2. N/A | 100 |
| 3. Interactions between participants is civil and solutions-oriented. | 3. N/A | 100 |
| 4. Some mentors are involved in externships. | 4. Internship program mentors have limited involvement in externships. | 50 |
| 5. Time to work with business partners is not built into the program. | 5. Externship schedule is flexible and allows some time to work with business partners. | 100 |

# Appendix M: Evolution of Behavioral Variations for Faculty Externships: Planning and Preparation

**Table M1**

*Ideal Behaviors: Faculty Externships- Subcomponent Planning and Preparation*

| R1 Brainstorming | R3 Strong/ moderate % | P3 Revisions | P3 Strong/ moderate % |
|---|---|---|---|
| 1. Outcomes for externship are clearly communicated to, and agreed upon by, all stakeholders. | 90 | 1. Outcomes for externship are mutually beneficial to stakeholders. They are clearly communicated to, and agreed upon by, all participants. | 100 |
| 2. Teacher needs and gaps are communicated to business partners and intermediaries. | 100 | 2. N/A | 100 |
| 3. Adequate time to conduct and debrief externships is imbedded in school calendar. | 90 | 3. N/A | 100 |
| 4. Developed in Phase 3. | --- | 4. Leaders from businesses and schools collaborate to organize and run externships | 100 |
| 5. Externships are aligned with career pathways offered by the school. | 72 | 5. N/A | 100 |
| 6. Timely response to student email. | --- | 6. Removed in Phase 2 Round 2. | --- |

**Table M2**

*Unacceptable Behaviors: Faculty Externships- Subcomponent Planning and Preparation*

| R1 Brainstorming | R3 Strong/ moderate % | P3 Revisions | P3 Strong/ moderate % |
|---|---|---|---|
| 1. School leadership does not foster buy-in to the purpose. | 100 | 1. School leadership does not foster buy-in to the purpose of faculty externships. | 100 |
| 2. Externship is disorganized, lacking in transparency and communication | 90 | 2. The externship is disorganized, lacking in transparency and communication. | 100 |
| 3. Formed in Phase 3. | --- | 3. No time is allocated to running or debriefing externships. | 100 |
| 4. There is an expectation that business leaders organize and run externships. | 64 | 4. Removed in Phase 2: Round 3. | --- |
| 5. Externships are not connected to career pathways offered by the school. | 82 | 5. N/A | 100 |

**Table M3**

*Acceptable Behaviors-Facutly Externships: Planning and Preparation*

| R1: Brainstorming | R2: Revisions | R3 Strong/ moderate % |
|---|---|---|
| 1. Intended outcome are presented to participants. | 1. N/A. | 100* |
| 2. There is consistent communication between stakeholders. | 2. N/A. | 100* |
| 3. Some time to conduct and debrief externships is embedded in the school calendar. | 3. N/A. | 100 |
| 4. Business leaders organize and run the externship. | 4. N/A. | 88 |
| 5. Externships are aligned with career pathways offered by the school. | 5. N/A. | 88 |

*Indicates behavior that was strongly endorsed by all participants

# Appendix N: Evolution of Behavioral Variations for Co-Created Career Themed Curriculum: Planning and Collaboration

**Table N1**

*Ideal Behaviors: Co-Created Curriculum- Subcomponent Planning and Collaboration*

| R1 Brainstorming | R3 Strong/ moderate % | P3 Revisions | P3 Strong/ moderate % |
|---|---|---|---|
| 1. Time and resources provided to create curriculum and collaborate with business partners. | 90 | 1. Time and resources are provided to collaborate with business partners and create the curriculum. | 100 |
| 2. Frequently schedule planning and collaboration meetings. | 100 | 2. Planning and collaboration meetings are frequently and consistently scheduled (at least once per month). Stakeholders regularly attend meetings and actively contribute ideas. | 100 |
| 3. Stakeholders are flexible, honest, and open-minded, willing to learn, and have an innovative mindset. | 100 | 3. Stakeholders use a variety of tools (virtual, email, in-person) to consistently communicate. They are flexible, honest, open-minded, willing to learn, and have an innovative mindset. | 100 |
| 4. Facilitators are identified to keep the development process moving. | 90 | 4. Facilitators are identified to advance and motivate the curriculum development process. | 100 |

**Table N2**

*Unacceptable Behaviors: Co-Created Curriculum- Subcomponent Planning and Collaboration*

| R1 Brainstorming | R3 Strong/ moderate % | P3 Revisions | P3 Strong/ moderate % |
|---|---|---|---|
| 1. Disregard for building partnership as a means to benefit students. | 82 | 1. Minimal or no time and resources are provided to collaborate about curriculum. | 100 |
| 2. Formed in P3. | --- | 2. Planning and collaboration meetings are neither consistently scheduled nor attended by stakeholders. | 100 |
| 3. Lack of communication and collaboration. | 82 | 3. There is a lack of communication, collaboration, and follow through. | 100 |
| 4. Formed in P3. | --- | 4. There is no leadership structure to facilitate curriculum development. | 100 |

**Table N3**

*Acceptable Behaviors-Co-Created Curriculum: Planning and Collaboration*

| R1: Brainstorming | R2: Revisions | R3 Strong/ moderate % |
|---|---|---|
| 1. Some time and resources are provided to align curriculum on a flexible schedule convenient for the majority of the committee. | 1. Some time and resources are provided to collaborate and align curriculum. | 100* |
| 2. Planning and collaboration meetings occur at least once per grading period/quarter. Stakeholders provide feedback but do not always attend meetings. | 2. N/A | 88 |
| 3. Stakeholders use a variety of tools (virtual, email, in-person) to consistently communicate. Interactions are positive, respectful, and focus on student success. | 3. Stakeholders consistently communicate. Interactions are positive, respectful, and focus on student success. | 100 |
| 4. A leadership structure is in place to facilitate the process. | 4. A leadership structure is in place to facilitate the curriculum development process. | 88 |

*Indicates behavior that was strongly endorsed by all participants

Appendix O: Evolution of Behavioral Variations for Co-Created Career Themed Curriculum: Stakeholder Contributions

**Table O1**

*Ideal Behaviors: Co-Created Curriculum- Subcomponent Stakeholder Contributions*

| R1 Brainstorming | R3 Strong/ moderate % | P3 Revisions | P3 Strong/ moderate % |
|---|---|---|---|
| 1. Stakeholders are actively involved in and equally contribute to curriculum development. | 100 | 1. All stakeholders are actively involved in and equally contribute to curriculum development. | 100 |
| 2. Business partners identify specific industry expectations and soft skills to include in curriculum. | 100 | 2. Business partners share industry and community specific problems that form the foundation of student projects. Industry expectations, soft skills, and training materials are fully incorporated into the curriculum ensuring contextual teaching and learning scenarios. | 100 |
| 3. Formed in Phase 3. | --- | 3. Business partners understand content standards and make recommendations to update curriculum based on ever-changing industry needs. | 100 |

**Table O2**

*Unacceptable Behaviors: Co-Created Curriculum- Subcomponent Stakeholder Contributions*

| R1 Brainstorming | R3 Strong/ moderate % | P3 Revisions | P3 Strong/ moderate % |
|---|---|---|---|
| 1. One-sided communication of needs and agreements by a single stakeholder group. | 90 | 1. Stakeholders are siloed in responsibilities and convey one-sided needs or wants. | 100 |
| 2a. Curriculum is short-sighted and lacks content integration. | 90 | 2. The curriculum lacks industry integration. It is short-sighted, focusing on obvious connections, stereotypes, and quick wins. | 100 |
| 2b. Only focused on obvious connections and quick wins. | 82 | Combine with 2a. | --- |
| 2c. Stereotyping. | 73 | Combine with 2a. | --- |
| 6. Educators are rigid and unwilling to compromise or adjust the curriculum to meet employer needs. | 90 | 3. Stakeholders are rigid and unwilling to compromise or adjust curriculum to meet each other's needs. | 100 |

**Table O3**

*Acceptable Behaviors-Co-Created Curriculum: Stakeholder Contributions*

| R1: Brainstorming | R2: Revisions | R3 Strong/ moderate % |
|---|---|---|
| 1. The school leads curriculum development with input and contributions from stakeholders. | 1. N/A | 100 |
| 2. Business partners share industry expectations and skills to support the school's curriculum planning efforts | 2. Business partners support curriculum planning efforts by sharing industry-specific expectations and skills. They provide feedback on ways to increase industry connections and contexts. | 88 |
| 3. Educators and business partners agree upon adjustments to the curriculum. | 3. Educators and business partners agree upon adjustments and updates to curriculum. | 100 |
| 4. Stakeholders may contribute to employability skills conversation via virtual means (email, Google survey, etc.) | 4. Removed per expert comments. | --- |

Appendix P: Evolution of Behavioral Variations for Co-Developed Employability Skills: Collaboration and Communication

**Table P1**

*Ideal Behaviors: Co-Develop Employabiltiy Skills- Subcomponent Collaboration and Communication*

| R1 Brainstorming | R3 Strong/ moderate % | P3 Revisions | P3 Strong/ moderate % |
|---|---|---|---|
| 1. Time and resources provided so teachers can co-develop employability skills with business partners. | 100 | 1. Time and resources are provided so teachers can co-develop employability skills with business partners and develop an authentic curriculum to teach students these skills. | 100 |
| 2. Develop a structured system to gather and discuss input from all stakeholders. | 90 | 2. A structured system to gather and discuss input from all stakeholders is developed. | 100 |
| 3a. Flexible and open-minded. *R2 Revision:* Stakeholders are flexible and open-minded. | 100 | 3. There is frequent communication and active collaboration between all groups. Stakeholders are flexible and open-minded. | 100 |
| 3b. Open communication and active collaboration between all groups. | 100 | Combine with 3a. | 100 |

**Table P2**

*Unacceptable Behaviors: Co-Develop Employabiltiy Skills- Subcomponent Collaboration and Communication*

| R1 Brainstorming | R3 Strong/ moderate % | P3 Revisions | P3 Strong/ moderate % |
|---|---|---|---|
| 1. Unwilling to make time to meet and form employability skills. | 100 | 1. Stakeholders are unwilling to make time to meet and develop employability skills. | 100 |
| 2. Schools do not incorporate suggestions from business partners. | 100 | 2. N/A | 100 |
| 3. Lack of communication. | 100 | 3. Stakeholders do not communicate. | 100 |

**Table P3**

*Acceptable Behaviors: Co-Develop Employabiltiy Skills- Subcomponent Collaboration and Communication*

| R1: Brainstorming | R2: Revisions | R3 Strong/ moderate % |
|---|---|---|
| 1. Time and resources are provided to teachers for developing employability skills and an associated curriculum. | 1. N/A | 100 |
| 2. Business partners review and provide feedback on the teacher developed employability skills. | 2. N/A | 100 |
| 3a. Stakeholders communicate and collaborate on a regular basis. | 3. N/A | 100 |
| 3b. Stakeholders who cannot attend a meeting contribute virtually/via email or assign a representative to gather information. | 3b. N/A *combined with 3a in P3 R3* | 88 |

Appendix Q: Evolution of Behavioral Variations for Co-Developed Employability Skills:

Subcomponent Development and Implementation

**Table Q1**

*Ideal Behaviors: Co-Develop Employabiltiy Skills- Subcomponent Development and Implementation*

| R1 Brainstorming | R3 Strong/ moderate % | P3 Revisions | P3 Strong/ moderate % |
|---|---|---|---|
| 1. Align employability skills with content standards and General Learner Outcomes (GLOs). | 100 | 1. Stakeholders collaborate to develop employability skills that reflect current industry demands. They align with content standards and General Learner Outcomes (GLOs). | 100 |
| 2. Shared understanding of, and expectation for, implementing employability skills in schools. | 100 | 2. Stakeholders share an understanding of, and expectations for, implementing employability skills school wide. | 100 |
| 3. Set expectations to a level that is appropriate for the industry to prepare students for post-secondary demands. | 100 | 3. Employability skill expectations meet industry appropriate levels to prepare students for post-secondary demands. | 100 |
| 4. Developed in Phase 3. | --- | 4. Students are provided frequent opportunities to apply and demonstrate proficiency with employability skills. | 100 |
| 5. Developing realistic and measurable student results. | 100 | 5. A rubric is developed with realistic and measurable student result indicators. It is used to provide feedback to students on employability skill performance. | 100 |
| 6. Showing the mentors the right and acceptable way to be a professional. | 100 | 6. All stakeholders model professionalism to students by following employability skills expectations. | 100 |

**Table Q2**

*Unacceptable Behaviors: Co-Develop Employabiltiy Skills- Subcomponent Development and Implementation*

| R1 Brainstorming | R3 Strong/ moderate % | P3 Revisions | P3 Strong/ moderate % |
|---|---|---|---|
| 1. Selecting skills that do not align to a career. | 82 | 1. Skills are selected that do not align with industry demands. | 100 |
| 2. Stakeholder groups do not align expectations and understanding of employability skills. | 100 | 2. N/A | 100 |
| 3. Not reinforcing employability skills in schools. | 90 | 3. Employability skills are not implemented or reinforced in schools. | 100 |
| 4. Developed in Phase 3. | --- | 4. Students are provided little to no opportunities to practice employability skills. | 100 |
| 5. Lack of feedback to students for skills improvement. | 90 | 5. Students do not receive feedback on ways to improve skills. | 100 |
| 6. Business partners not setting an example for mentors of following employability skills. | 100 | 6. Stakeholders do not follow employability skills expectations. | 100 |

**Table Q3**

*Acceptable Behaviors: Co-Develop Employabiltiy Skills- Subcomponent Development and Implementation*

| R1: Brainstorming | R2: Revisions | R3 Strong/ moderate % |
|---|---|---|
| 1. Employability skills are updated to match industry changes and align with either content standards or GLOs. | 1. N/A | 100 |
| 2. Stakeholders plan to implement employability skills in schools. | 2. Stakeholders align understanding of employability skills and plan to implement them school wide. | 100 |
| 3. Employability skill expectations and lessons are developed at high school-appropriate levels. | 3. N/A | 100 |
| 4. Students have opportunities to practice employability skills. | 4. N/A | 100 |
| 5. A rubric is developed to provide feedback to students on the employability skill performance. | 5. Realistic and measurable student result indicators are developed. | 100 |

# Appendix R: Evolution of Behavioral Variations for Work-Based Learning Opportunities: Subcomponent Opportunity Development

**Table R1**

*Ideal Behaviors: Work-Based Learning Opportunities- Subcomponent Opportunity Development*

| R1 Brainstorming | R3 Strong/ moderate % | P3 Revisions | P3 Strong/ moderate % |
|---|---|---|---|
| 1. Communicate ideas that contain social currency and are top of mind, deliver a feeling, visible, packaged easily, and wrapped into a compelling story. | 81.8 | 1. WBL opportunities are clearly rooted in real-world scenarios, communicate ideas that contain social currency, are progressive, and easily implemented and executed. | 100 |
| 2. Developed in Phase 3. | --- | 2. WBL event is aligned to a career pathway and provides students with opportunities to practice employability skills with industry partners. | 100 |
| 3a. WBL opportunities are organized and clear expectations are set for participants. | 100 | 3. WBL opportunities are well organized with clear expectations for participants and a flexible timeline allowing increased student participation. | 100 |
| 3b. Flexible timeline for allowing increased student participation. | 82 | Combined with #3a. | --- |
| 4. *Formed in Round 2.* Follow-up beyond the WBL opportunity. | 82 | 7. Planned follow-up after the WBL opportunity occurs. | 100 |

**Table R2**

*Unacceptable Behaviors: Work-Based Learning Opportunities- Subcomponent Opportunity Development*

| R1 Brainstorming | R3 Strong/ moderate % | P3 Revisions | P3 Strong/ moderate % |
|---|---|---|---|
| 1. Setting goals/ requirements of the opportunity to a level that excludes or overwhelms students. | 100 | 1. The goals/requirements of the opportunity are set to a level that excludes or overwhelms students. | 100 |
| 2. Developed in Phase 3. | --- | 2. WBL event is not aligned to a career pathway. | 100 |
| 3. *Revised in Round 2:* WBL opportunities are disorganized and there is poor communication between facilitators. | 100 | 3. N/A | 100 |
| 4. Not following up after a WBL opportunity is established/created. | 90 | 4. There is no follow-up after a WBL opportunity is established/created. | 100 |

**Table R3**

*Acceptable Behaviors: Work-Based Learning Opportunities- Subcomponent Opportunity Development*

| R1: Brainstorming | R2: Revisions | R3 Strong/ moderate % |
|---|---|---|
| 1. WBL opportunities have real-world implications that consider the school, student and community. | N/A | 100 |
| 2. The WBL event is aligned to a career pathway. | N/A | 100 |
| 3. WBL opportunities are organized with clear expectations for participants. Flexibility is constrained by student, school, and community factors. | N/A | 100 |
| 4. Limited follow up after the WBL opportunity. | N/A | 75 |

Appendix S: Evolution of Behavioral Variations for Work-Based Learning Opportunities:

Subcomponent Stakeholder Involvement

**Table S1**

*Ideal Behaviors: Work-Based Learning Opportunities- Subcomponent Stakeholder Involvement*

| R1 Brainstorming | R3 Strong/ moderate % | P3 Revisions | P3 Strong/ moderate % |
|---|---|---|---|
| 1. Collaborative effort where all stakeholders have a clear return on investment. | 73 | 1. The WBL opportunity is a collaborative effort where all stakeholders have a clear return on investment. | 100 |
| 2a. Strong and consistent communication between stakeholder groups with scheduled meeting times. | 90 | 2. Stakeholders have strong communication, commitment, and consistently schedule meeting times. | 100 |
| 2b. Consistent commitment. | 90 | Combined with #2a. | --- |
| 3. Schools and business partners select strong intermediaries to support the partnership structure. | 73 | 3. N/A | 100 |
| 4. DOE regulation training on WBL site safety for all stakeholders. | 90 | 4. All stakeholders receive DOE regulation training on WBL site safety. | 100 |
| 5. Partners are involved with mentors and mentors invite and involve their partners | 81 | 5. Removed due to redundancy and suggestion from participants. | --- |

**Table S2**

*Unacceptable Behaviors: Work-Based Learning Opportunities- Subcomponent Stakeholder Involvement*

| R1 Brainstorming | R3 Strong/ moderate % | P3 Revisions | P3 Strong/ moderate % |
|---|---|---|---|
| 1. Not building on the business relationship to create a mutually beneficial partnership. | 82 | 1. Stakeholders do not build on the business relationship to create a mutually beneficial partnership. | 100 |
| 2. Stakeholder groups do not support each other. | 90 | 2. Stakeholder groups do not support each other or communicate. | 100 |
| 3. Not using the experience to create a plan that will benefit students. | 90 | 3. Stakeholders do not use the WBL experience to create a plan that will benefit students. | 100 |
| 4. Developed in Phase 3. | --- | 4. DOE safety regulations and protocols are not considered nor followed. | 100 |
| 5. Mentees and mentors avoid and do not invite each other. | 100 | 5. Removed in Phase 3. | --- |

**Table S3**

*Acceptable Behaviors: Work-Based Learning Opportunities- Subcomponent Stakeholder Involvement*

| R1: Brainstorming | R2: Revisions | R3 Strong/ moderate % |
|---|---|---|
| 1. Collaborators are committed to and invested in the partnership. | N/A | 100 |
| 2. There is strong communication between stakeholders. Businesses communicate with schools when they cannot meet a requirement or attend an event. | N/A | 100 |
| 3. No behavior developed. | --- | --- |
| 4. A plan for safety trainings are established. | N/A | 100 |
| 5. Students are supported by mentors to ensure a positive WBL experience. | Removed in Round 2. | --- |

# Appendix T: Evolution of Behavioral Variations for Shared Vision for Partnership: Work-Based Learning Opportunities: Subcomponent Student Interactions

**Table T1**

*Ideal Behaviors: Work-Based Learning Opportunities- Subcomponent Student Interactions*

| R1 Brainstorming | R3 Strong/ moderate % | P3 Revisions | P3 Strong/ moderate % |
|---|---|---|---|
| 1. Enthusiasm in working with students. | 90 | 1. Stakeholders show enthusiasm in working with students. | 100 |
| 2. Collaborate to ensure students are prepared for participation in WBL opportunities. | 100 | 2. Stakeholders collaborate to ensure students are prepared for participation in the WBL opportunities. | 100 |
| 3. Formed in Phase 3. | --- | 3. Educators and business partners share in their understanding for the WBL event and how participation will benefit students. These understandings are communicated to students. | 100 |

**Table T2**

*Unacceptable Behaviors: Work-Based Learning Opportunities- Subcomponent Student Interactions*

| R1 Brainstorming | R3 Strong/ moderate % | P3 Revisions | P3 Strong/ moderate % |
|---|---|---|---|
| 1. Facilitators are boring, uninspiring, or have a negative attitude about their career. *R2 Revision:* Facilitators lack passion, are uninspiring, or have a negative attitude about their career. | 90 | 1. N/A | 100 |
| 2. Not taking the time to prepare or support students for success with WBL opportunities. | 90 | 2. N/A. | 100 |
| 3a. Importance of WBL opportunity is understated | 100 | 3. Stakeholders promote a trivial attitude in students by understating the importance of WBL experiences. | 100 |
| 3b. Allowing the students to not take WBL opportunities seriously. | 100 | Combined with 3a. | |

**Table T3**

*Acceptable Behaviors: Work-Based Learning Opportunities- Student Interactions*

| R1: Brainstorming | R2: Revisions | R3 Strong/ moderate (%) |
|---|---|---|
| 1. Stakeholders have positive attitudes and interactions with students. | 1. N/A | 100 |
| 2. Stakeholders understand the benefits of collaborating to prepare students for WBL opportunities. | 2. N/A | 100 |
| 3. Educators discuss WBL events to provide deeper understanding of the experience. | 3. Educators discuss WBL events with students to provide deeper understanding of the experience. | 100 |

Appendix U: Evolution of Behavioral Variations for Students Participate in Business Partner Events: Subcomponent Stakeholder Roles

**Table U1**

*Ideal Behaviors: Students Participate in Business Partner Events- Subcomponent Stakeholder Roles*

| R1 Brainstorming | R3 Strong/ moderate % | P3 Revisions | P3 Strong/ moderate % |
|---|---|---|---|
| 1a. Stakeholders collaborate to provide multiple, diverse experiences with businesses. | 90 | 1. Stakeholders collaborate to provide multiple, diverse volunteer experiences for students at business partner events. | 100 |
| 1b. Volunteerism. | --- | --- | --- |
| 2. Business partners offer a sign-in sheet to student participants and follow up with students. | 100 | 2. Business partners connect and follow up with students to include them in official business events or internship opportunities. | 100 |
| 3. Businesses are open to including minors in events. | --- | 3. Business partners actively recruit student volunteers and adults welcome students at events. | 100 |
| 4a. Lead by example through sincere participation in events. | 100 | 4. Stakeholders lead by example through sincere participation in events and show enthusiasm when working with students. Student internship mentors get involved in events and invite/include mentees. | 100 |
| 4b. Enthusiasm in working with students. | 90 | Combined with #4a. | --- |
| 4c. Mentors get involved in events and invite/include mentees. | 82 | Combined with #4a. | --- |

**Table U2**

*Unacceptable Behaviors: Students Participate in Business Partner Events-Subcomponent Stakeholder Roles*

| R1 Brainstorming | R3 Strong/ moderate % | P3 Revisions | P3 Strong/ moderate % |
|---|---|---|---|
| 1. Not trying to plan and organize business partner events for student involvement. | 100 | 1. Stakeholders do not attempt to plan and organize volunteer experiences for students at business partner events. | 100 |
| 2. Lack of follow-through. *R2 Revision:* There is a lack of follow-through after the event. | 90 | 2. There is a lack of follow-up with students after the event. | 100 |
| 3. Not communicating these opportunities to students when they arise. | 100 | 6. Combined with 4. | --- |
| 7. Mentors and partners do not communicate or work together. | 100 | 4. Stakeholders and student mentors do not exhibit the behaviors expected of students. Business partner event opportunities are not communicated to students. | 100 |

**Table U3**

*Acceptable Behaviors: Students Participate in Business Partner Events- Subcomponent Stakeholder Roles*

| R1: Brainstorming | R2: Revisions | R3 Strong/ moderate % |
|---|---|---|
| 1. Stakeholders plan some volunteer experiences for students at business partner events. | 1. N/A | 100 |
| 2. Business partners connect and follow up with students to include them in official business events or internship opportunities | 2. Business partners offer a sign-in sheet to student participants and follow up with students. | 100 |
| 3. Business partners actively recruit student volunteers and adults welcome students at events. | 3. Business partners are open to including minors in events. | 88 |
| 3. Stakeholders and student mentors lead by example when participating in events and interacting with students. | 4. Stakeholders, including student mentors, lead by example at events and encourage students to become involved with events. | 100 |

Appendix V: Evolution of Behavioral Variations for Students Participate in Business Partner Events: Subcomponent Preparing Students

**Table V1**

*Ideal Behaviors: Students Participate in Business Partner Events-Subcomponent Preparing Students*

| R1 Brainstorming | R2 Strong/ moderate % | P3 Revisions | P3 Strong/ moderate % |
|---|---|---|---|
| 1. Communicate alignment between business partner events and future workforce goals to students. | 100 | 1. Students are able to express the connection between the business partner event and their future workforce goals. | 100 |
| 2. Establish clear guidelines, objectives, and expectations for students when interacting with adults. | 100 | 2. Employability skills are used to create clear adult interaction guidelines, objectives, and expectations for students. | 100 |
| 3. Teachers help shy students connect with business partners at events. *R2 Revision*: Shy students are prepared prior to an event with strategies that will help them rise above their comfort zone and connect with business partners at events. | 90 | 3. Prior to event, all students are prepared with strategies that will help them rise above their comfort zone and connect with individuals at events. | 100 |
| 4. Before an event, teachers share guest list with students and help them decide who to seek out at the event. | 82 | 4. Before an event, teachers share guest lists with students and help them decide who they might seek out at the event. | 100 |
| 5. Encourage students to participate in business partner events as a way to create more opportunities | 100 | 5. Removed in Phase 3 Round 2. | --- |

**Table V2**

*Unacceptable Behaviors: Students Participate in Business Partner Events- Subcomponent Preparing Students*

| R1 Brainstorming | R3 Strong/ moderate % | P3 Revisions | P3 Strong/ moderate % |
|---|---|---|---|
| 1. Stakeholders do not communicate the connection between the event and workforce needs to students. | 100 | 1. Students are unaware of the connection between the event and workforce needs. | 100 |
| 2. Perfection over progress. | 82 | 2. Value is placed on perfection over progress regarding student performance. | 100 |
| 3. Not assisting students with planning or preparation for event participation. | 100 | 3. & 4. No assistance or planning is provided to help students prepare prior for an event. | 100 |

**Table V3**

*Acceptable Behaviors: Students Participate in Business Partner Events- Subcomponent Preparing Students*

| R1: Brainstorming | R2: Revisions | R3 Strong/ moderate % |
|---|---|---|
| 1. Communicate alignment between business partner events and future workforce goals to students. | 1. Stakeholders communicate the connections between the event and workforce needs to students. | 100 |
| 2. Students are expected to demonstrate proficiency with employability skills while volunteering at business partner events. | 2. N/A | 100 |
| 3. Prior to an event, students are prepared to interact with adults and encouraged to venture outside of their comfort zone. | 3. Prior to an event, shy/reluctant students are prepared to interact with adults and encouraged to venture outside of their comfort zone. | 100 |
| 4. Teachers are available and accessible for students during events. | 4. N/A | 100 |

Appendix W: Evolution of Behavioral Variations for Shared Vision for Partnership:

Subcomponent Establishing Vision

**Table W1**

*Ideal Behaviors: Shared Vision for Partnership- Subcomponent Establishing Vision*

| R1 Brainstorming | R3 Strong/ moderate % | P3 Revisions | P3 Strong/ moderate % |
|---|---|---|---|
| 1. Time and resources are provided for teachers and industry partners to collaborate and establish a shared vision. | 100 | 1. All stakeholders are provided with time and resources to collaborate and establish a shared vision for the partnership. | 100 |
| 2a. Open and consistent communication between all groups. | 100 | 2. There is open and consistent communication between all groups, allowing for constructive criticism. Stakeholders are flexible and willing to compromise. | 100 |
| 2b. Constructive criticism. | 82 | Combined with #2a. | --- |
| 2c. Flexibility and willingness to compromise. | 90 | Combined with #2a. | --- |
| 3. A regular meeting schedule with structured agendas is established. | 100 | 3. A regular meeting schedule with structured agendas is established. If a stakeholder cannot attend a meeting, they will select a temporary representative. | 100 |
| 4. Developed in Phase 3. | --- | 4. The shared vision for the partnership aligns with both the career academy's vision and business partners' vision. | 100 |
| 5. Stakeholders are willing to learn about the whole school community. | 100 | 5. Removed in Phase 3 Round 2. | --- |
| 6. Ambition | 63.6 | 6. Removed in Phase 2 Round 3. | --- |

**Table W2**

*Unacceptable Behaviors: Shared Vision for Partnership- Subcomponent Establishing Vision*

| R1 Brainstorming | R3 Strong/ moderate % | P3 Revisions | P3 Strong/ moderate % |
|---|---|---|---|
| 1. No effort to establish a shared vision. | 90.1 | 1. There is little to no effort given to establishing a shared vision for the partnership. | 100 |
| 2a. Lack of communication and collaboration. | 90 | 2. There is a lack of communication and collaboration. Stakeholders are not willing to compromise, explore new options, and are narrow-minded in scope. | 100 |
| 2b. Not willing to compromise or explore new options. | 90 | Combined with 2a. | --- |
| 2c. Narrow-minded scope. | 82 | Combined with 2a. | --- |
| 3. Developed in Phase 3. | --- | 3. Meetings are ad hoc, poorly attended, and lack a set agenda. | 100 |
| 4. Developed in Phase 3. | --- | 4. The shared vision is not clearly aligned to the academy or business's visions. | 100 |
| 5. Stakeholders make assumptions. | 72 | 5. Removed in Phase 3 Round 2. | --- |

**Table W3**

*Acceptable Behaviors: Shared Vision for Partnership- Subcomponent Establishing Vision*

| R1: Brainstorming | R2: Revisions | R3 Strong/ moderate % |
|---|---|---|
| 1. Teachers and industry partners have opportunities to develop a vision to communicate the focus of the partnership. | 1. N/A | 100 |
| 2a. Communication occurs regularly and is mostly positive. | 2. Communication occurs regularly and is mostly positive. Stakeholders are willing to adjust their perspective and commit to the vision for the benefit of students. | 100* |
| 2b. Stakeholders are willing to adjust their perspective and commit to the vision for the benefit of students. | Combined with 2a. | --- |
| 3. Set meeting times, plus an agenda and outcomes, are communicated to stakeholders. | 3. N/A | 100 |
| 4. The shared vision for the partnership aligns with the career academy's vision. Students are aware of the vision for the partnership. | 4. The shared vision for the partnership aligns with the career academy's vision. | 100 |
| 5. Stakeholders are willing to learn about the whole school community. | 5. Removed. | --- |

*Indicates behavior that was strongly endorsed by all participants

Appendix X: Evolution of Behavioral Variations for Shared Vision for Partnership:

Subcomponent Vision Application

**Table X1**

*Ideal Behaviors: Shared Vision for Partnership- Subcomponent Vision Application*

| R1 Brainstorming | R3 Strong/ moderate % | P3 Revisions | P3 Strong/ moderate % |
|---|---|---|---|
| 1. Developed in Phase 3. | --- | 1. Students reflect on how shared vision plays a role in their development. | 100 |
| 2. There is buy-in and commitment to a common vision. | 90 | 2. There is commitment to the common vision. | 100 |
| 3. Educators and business partners are very familiar with the vision and use it as a guiding light to focus on the important issues of the partnership. | 90 | 3. All stakeholders are very familiar with the vision and use it as a lens to focus important partnership issues. | 100 |
| 4. Developed in Phase 3. | --- | 4. Stakeholders seamlessly incorporate the vision into projects. Students know and use the vision to develop goals. | 100 |

**Table X2**

*Unacceptable Behaviors: Shared Vision for Partnership- Subcomponent Vision Application*

| R1 Brainstorming | R3 Strong/ moderate % | P3 Revisions | P3 Strong/ moderate % |
|---|---|---|---|
| 1. Developed in Phase 3. | | 1. Stakeholders, including students, do not know the vision. | 100 |
| 2. Stakeholders do not know the vision. | 100 | 2. Stakeholders, including students, do not know the vision. | 100 |
| 3a. Not using the experience to create a plan that will benefit students. | 90 | 3. Stakeholders do not build on partnerships to create a mutually beneficial plan for students. | 100 |
| 3b. Stakeholders do not build on the business relationship to create a mutually beneficial partnership. | 90 | Combined with 3a. | --- |
| 4. Educators conduct teaching methods that ignore or disregard the shared vision. | 100 | 4. N/A | 100 |

**Table X3**

*Acceptable Behaviors: Shared Vision for Partnership- Subcomponent Vision Application*

| R1: Brainstorming | R2: Revisions | R3 Strong/ moderate % |
|---|---|---|
| 1. The shared vision for the partnership aligns with the career academy's vision. Students are aware of the vision for the partnership. | 1. Students are aware of the vision for the partnership. | 100 |
| 2. There is buy-in and-commitment to an established vision. | 2. There is commitment to an established vision. | 100 |
| 3. Relationships built between stakeholders are focused on the internship program and may be limited in scope of the vision. | 3. N/A | 100 |
| 4. Teachers and business partners can access the vision and use it as a lens to guide projects and develop goals for students. | 4. N/A | 100 |

# Appendix Y: Evolution of Behavioral Variations for Academy Advisory Boards: Subcomponent Member Roles

**Table Y1**

*Ideal Behaviors: Academy Advisory Boards- Subcomponent Member Roles*

| R1 Brainstorming | R3 Strong/ moderate % | P3 Revisions | P3 Strong/ moderate % |
|---|---|---|---|
| 1a. Stakeholders are willing to participate as board members. | 82 | 1. The advisory board has more than one established representative from each of the following: teachers, school leaders, business partners, students, parents, and community members. New voices are welcomed at the table. | 100 |
| 1b. Term limits are implemented to support rotating voices/new seats at the table. | 73 | Combined with 1a. | --- |
| 2. Mentors help suggest and share industry trends and the best pathways to start and or take. | 82 | 2. Board members and participants share current industry trends and propose career pathway evolutions to meet these trends. | 100 |
| 3a. Stakeholders are willing to meet later in the day to fit work schedules. | 90 | 3. Board members and participants are committed and participate at meetings. They are flexible and willing to meet later in the day to ensure regular attendance. | 100 |
| 3b. Consistent board members. | 90 | Combined with 3a. | --- |
| 3c. Organization. | 73 | Combined with 3a. | --- |
| 4. Commitment to participation and follow-through from participants. | 90 | 4. Stakeholders follow-through with commitments and assigned tasks. | 100 |

**Table Y2**

*Unacceptable Behaviors: Academy Advisory Boards- Subcomponent Member Roles*

| R1 Brainstorming | R3 Strong/ moderate % | P3 Revisions | P3 Strong/ moderate % |
|---|---|---|---|
| 1a. Members too busy to take time to work together. | 100 | 1. Stakeholders do not make time to be involved with the advisory board. | 100 |
| 1b. Members not being involved and too busy to be a participant. | 100 | Combined with 1a. | --- |
| 2a. No buy-in from the industry. | 82 | 2. There is no buy-in from the industry. Participants want to adhere to the status quo regarding educational practices. | 100 |
| 2b. Status quo. | 73 | Combined with 2a. | --- |
| 3. There is a lack of attendance and participation from stakeholders at planned meetings. | 100 | 3. N/A | 100 |
| 4. No follow up with stakeholders. | 100 | 4. There is no follow-through by stakeholders. | 100 |

**Table Y3**

*Acceptable Behaviors: Academy Advisory Boards- Subcomponent Member Roles*

| R1: Brainstorming | R2: Revisions | R3 Strong/ moderate % |
|---|---|---|
| 1. Stakeholders are willing to be board members OR an active participant if they cannot serve on the board. | 1. N/A | 75 |
| 2. Advisory board members and participants suggest the best pathways to start and or take to enter a career. | 2. N/A | 75 |
| 3. Most board members and participants regularly attend and participate in meetings though there are no expectations to meet beyond the scope of the work day. | 3. N/A | 75 |
| 4. Developed in Round 2. | 4. Stakeholders communicate and request support to ensure follow-through with commitments and assigned tasks. | 100 |

Appendix Z: Evolution of Behavioral Variations for Academy Advisory Boards:

Subcomponent Communication and Relationships

**Table Z1**

*Ideal Behaviors: Academy Advisory Boards- Subcomponent Communcaiton and Relationships*

| R1 Brainstorming | R3 Strong/ moderate % | P3 Revisions | P3 Strong/ moderate % |
|---|---|---|---|
| 1. Creating strong relationships with business partners. Get involved with industry events when possible. | 90 | 1. Schools create strong, positive relationships with business partners. Educators and students get involved with industry events to expand college and career opportunities. | 100 |
| 2. Time and resources to establish academy advisory boards through consistent and structured collaboration meetings are provided. | 100 | 2. Time and resources are provided to establish academy advisory boards through organized, consistent, and structured collaboration meetings. | 100 |
| 3. Developed in Phase 3. | --- | 3. Meeting agendas are shared prior to each meeting, clearly and consistently communicating the purpose and outcomes for each meeting. | 100 |
| 4. Stakeholders show enthusiasm when working with student. | 100 | 4. N/A | 100 |

**Table Z2**

*Unacceptable Behaviors: Academy Advisory Boards- Subcomponent Communcaiton and Relationships*

| R1 Brainstorming | R3 Strong/ moderate % | P3 Revisions | P3 Strong/ moderate % |
|---|---|---|---|
| 1a. Not using the experience to create a plan that will benefit students. | 100 | 1. Stakeholders do not build on the business relationship to create a mutually beneficial partnership or a plan that will benefit students. | 100 |
| 1b. Not building on the business relationship to create a mutually beneficial partnership. | 90 | Combined with 1a. | --- |
| 2. Developed in Phase 3. | --- | 2. Little to no resources are allotted to support the establishing advisory boards. | 100 |
| 3. Poor communication about purpose of meeting. | 90 | 3. There is poor communication between stakeholders. Few know the purpose of and for meetings. | 100 |
| 4. Entitlement/disrespect. | 73 | 4. Participants have an attitude of entitlement and disrespect. | 100 |

**Table Z3**

*Acceptable Behaviors: Academy Advisory Boards- Subcomponent Communcaiton and Relationships*

| R1: Brainstorming | R2: Revisions | R3 Strong/ moderate % |
|---|---|---|
| 1. Stakeholders build positive relationships to create opportunities for students, though there may be limited effort made to expand program offerings. | 1. N/A | 100 |
| 2. Some time and resources are allocated for stakeholders to meet and establish academy advisory boards. | 2. N/A | 75 |
| 3. The purpose of and for meetings is communicated to members and participants. There is positive, consistent, and open communication between all stakeholders. | 3. The purpose of and for meetings is communicated to members and participants. | 100 |
| 4. Stakeholders have a positive attitude and work well with students. | 4. N/A | 100 |