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Secondary School Teachers' Perceptions of Professional Development in an Urban School District in Liberia

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Walden University

College of Education and Human Sciences

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Moses Blonkanjay Jackson

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

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2024

Abstract

Secondary School Teachers' Perceptions of Professional Development in an Urban

School District in Liberia

by

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EdM, Harvard Graduate School of Education, 2009

MsEd, Saint Joseph's University, 2007

BSc, University of Liberia, 1988

Project Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Education

Walden University

May 12, 2024

Abstract

Due to the low academic performance of Liberian students, in 2013, the president of Liberia declared that the education sector needed to be overhauled. Consequently, the education minister launched a nationwide professional development (PD) program. Despite the PD initiatives, academic performance in an urban school district (USD, a pseudonym) has not improved. The purpose of this qualitative study was to explore Liberian secondary teachers' perceptions on the strength, weakness, and recommended improvements of the PD at USD. The theoretical framework that guided the study was Mezirow's transformational learning theory. The key research questions were focused on the secondary school teachers' perceptions of the existing PD. A basic qualitative research design was used to conduct interviews with eight secondary school teachers who have attended at least two PD sessions. Thematic analysis technique was applied to code and analyze the data. The findings showed weakness and strength in separate aspects of the USD PD. Salient data revealed a need for the existing PD to be revised to be in sync with widely used adult learning theories. The findings from this research can lead to positive social change when used by stakeholders to understand and change the perceptions of teachers and improve their teaching skills.

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Dedication

This doctoral journey is dedicated to my organization, my grandchildren, and my faith. I dedicate this journey to my organization, the Diversified Educators Empowerment Project (DEEP), for giving me exceptional time off to complete this work. Each time I ran out of vacation days, the organization was gracious to consider my request for more time. DEEP, as an education management group, also encouraged me to continue due to their expressed interest in the findings that will emerge from this study. My grandchildren missed me more than I missed them while I was away from home. When I was home, they had somebody to listen to their stack of stories, take them to the park, the pool, and to answer all their questions even if the answers did not make sense. As a Christian, I dedicate this journey to the Compassionate Savior, Jesus Christ, for giving me strength and good health each day I sat at my computer to work on this project study. Each time I felt weary or confused I disengaged, prayed a little, and returned with more vigor. Last but not the least, I am grateful to my wife of 42 years for the motivation and support.

Table of Contents

| | |
|--|----|
| List of Tables | v |
| Section 1: The Problem..... | 1 |
| The Local Problem..... | 3 |
| Rationale | 4 |
| Definition of Terms..... | 5 |
| Significance of the Study | 6 |
| Research Questions | 7 |
| Review of Literature | 7 |
| Conceptual Framework..... | 7 |
| Review of the Broader Problem..... | 12 |
| Purposes of Teacher PD..... | 14 |
| Transformative Learning Strategies in PD | 16 |
| Self-Directed Learning Strategies in PD..... | 17 |
| TL as Simulation-Based Learning in Healthcare Disciplines..... | 18 |
| Transformative Learning Strategies in Educational Technology | 20 |
| African Experiences of TL in Educational Technology Strategy | 21 |
| Professional Arguments on Mezirow’s TL..... | 23 |
| Teachers’ Perceptions of PD..... | 23 |
| Factors That Identify PD Effectiveness | 26 |
| Liberian Education Sector PD Challenges..... | 27 |
| Implications..... | 30 |

| | |
|--|----|
| Summary | 30 |
| Section 2: The Methodology..... | 32 |
| Qualitative Research Design and Approach | 32 |
| Participants..... | 35 |
| Data Collection | 39 |
| Role of the Researcher | 42 |
| Data Analysis | 43 |
| Data Analysis Process..... | 43 |
| Data Analysis Results | 45 |
| Process of Generating and Recording Data | 47 |
| Coding Process..... | 50 |
| Findings..... | 51 |
| RQ1: What are Liberian secondary school teachers' perceptions of the strength of the PD at USD?..... | 53 |
| RQ2: What are Liberian secondary teachers' perceptions of the weakness of the PD at USD?..... | 55 |
| RQ 3: What are Liberian secondary teachers' perceptions of the recommended improvements of the PD at USD? | 59 |
| Summary of the Themes | 61 |
| Accounting for Salient Data..... | 64 |
| Evidence of Quality | 65 |
| Dealing with Discrepant Cases | 65 |

| | |
|---|----|
| Summary of Outcomes | 66 |
| Description of Project Deliverable as Outcome of the Results..... | 67 |
| Section 3: The Project..... | 69 |
| Rationale | 70 |
| Review of the Literature | 72 |
| Perspectives Of Educational Reform | 73 |
| U.S. Educational Reform Policy Situations..... | 74 |
| Genres of PD Reform Pathways | 76 |
| Position of Teachers in Educational Reform | 78 |
| Teacher Education as a Desirable Reform Pathway | 79 |
| Online Professional Development as Pathway for Adult Learners | 82 |
| Relationship of PD Pathways to the Conceptual Framework..... | 84 |
| Mezirow’s Perspective Transformation Construct | 86 |
| Universal Design for Learning as Reform Pathway | 87 |
| Learning Approach Situations in Liberia..... | 88 |
| Project Description..... | 89 |
| Needed Resources | 90 |
| Proposal for Implementation..... | 91 |
| Policy Proposal Project..... | 92 |
| Project Evaluation Plan..... | 94 |
| Project Implications | 95 |
| Importance of the Project..... | 96 |

| | |
|---|-----|
| Section 4: Reflections and Conclusions..... | 98 |
| Project Strengths and Limitations..... | 98 |
| Project Strengths | 99 |
| Project Limitations..... | 100 |
| Recommendations for Alternative Approaches | 102 |
| Different Ways to Address the Problem | 102 |
| Alternative Definitions and Alternative Solutions of the Problem..... | 103 |
| Instructional Period PD Approach | 105 |
| Half Day/Early Dismissal Approach | 105 |
| In-Service Certification Teacher Training | 105 |
| Outsource the PD Facilitation..... | 106 |
| Scholarship, Project Development, and Leadership and Change | 108 |
| Reflective Analysis as a Scholar Practitioner | 108 |
| Reflective Analysis as a Project Developer | 109 |
| Leadership and Change..... | 111 |
| Reflection on the Importance of the Work | 112 |
| Implications, Applications, and Directions for Future Research | 113 |
| Conclusion | 115 |
| My Lifetime Inspiration and Mantra..... | 118 |
| References..... | 121 |
| Appendix A: The Project | 144 |

List of Tables

| | |
|---|-----|
| Table 1. Participants' Demographics | 46 |
| Table 2. Related Interview Questions | 49 |
| Table 3. Themes and Codes | 52 |
| Table 4. Alternative Ways to Implement Project..... | 107 |

Section 1: The Problem

The need to implement effective teacher professional development (PD) programs to improve teaching and learning has proven to be a determinant of quality education. According to Odour (2016). In many West African countries, one of the yardsticks used to label education quality is student performance on the West Africa Secondary School Certificate Examinations (WASSCE). The massive student failure in the WASSCE in Liberia created a national emergency that claimed the attention of the Government of Liberia (Odour, 2016). Former President Johnson-Sirleaf highlighted the need for change in Liberia when she declared the need for serious overhaul. Other countries that use the WASSCE have used it to spark internal research to understand their results. Performance of urban school district secondary students in the WASSCE is low. In 2020, the Ministry of Education (MOE) Annual School Census 2019 and 2020 reported that there were 35,150 secondary students in USD. In 2021 the national office of West African Examination Council (WAEC) reported that 48.7% of secondary students in USD failed the WASSCE. The low WASSCE scores of students in USD are factors of the nationwide low learning outcome in the Liberian education sector.

According to a World Bank report, there is a low learning outcome and inadequate learning outcomes assessment capacity at all levels of the education sector (Azevedo et al., 2021). The report noted that the challenges marked by low levels of learning reflected, ranged from lack of instructional materials to poor teacher quality. In 2020, the Liberia national office of WAEC also reported that between 2007 to 2017, pass grades for the Liberia Junior High School Certificate Exams (LJHSCE) and the Liberia

Senior High School Certificate Exams (LSHSCE) dropped dramatically from 95% to 59% and from 81% to 48%. This trend in fail rates in the WASSCE also confirmed the low learning outcomes in the Liberian education sector. In 2013, out of the 26,734 students who sat the WASSCE, a record 7,884 or 29.49% failed; in 2014, 27,651 students sat the exams and 13,349 or 48.26% failed (Odour, 2016). Due to the Ebola pandemic, the 2015 and 2016 exams were condensed. Out of 46,927 students who took those exams, 22,671 or 48.46% failed. All of this occurred over the tenure of Liberian President Johnson Sirleaf and was one of the reasons for the mandate to overhaul the education system. Following President Sirleaf's tenure, the Ministry of Education (MOE) 2019/2020 Annual School Census reported that at least 50% of Liberian teachers are not certified to teach in Liberian schools.

Due to the deficient performance of Ghanaian students in Geography on the WASSCE, a study was conducted to investigate underlying causes and improvement strategies (Anlimachie, 2019). In Sierra Leone, practical strategies for teachers in successful schools to provide structures for PD for teachers in struggling neighboring schools were suggested (Mason et al., 2018). While the Ghanaian, Liberian, and Sierra Leonean situations confirmed the need for improvement, Zalmon and Wonu (2017) showed that Nigerian students' performance in WASSCE in general mathematics achievement was significant and proposed existing teaching practices be sustained. As a result of the diverse regional WASSCE results, the Liberian government mandated all schools to conduct regular teachers' PD to improve teacher practice and student performance (Odour, 2016).

The Local Problem

The problem that was addressed by this study was that teacher PD in USD is not improving teaching and student learning as anticipated following the application of PD. Little is understood about teachers' perceptions of PD. To manage the delivery and gains of regular PD, the ministry of education designated an urban area school district as the model school district and exemplar (Liberia Ministry of Foreign Affairs, 2011). Despite this designation and intent, a gap exists. From 2013 to 2022, the general education quality was below average in terms of WASSCE standards, and has not significantly improved, thus posing challenges to the whole education sector of Liberia. Following President Sirleaf's tenure, the Ministry of Education 2020 Annual School Census reported that at least 50% of Liberian teachers are not certified to teach in Liberian schools (du Toit-Brits, 2020).

The expected situation at USD is that student academic performance, as one of the indicators of good teaching, should be improving, but it is not. Ajani (2019) noted that the goal of teachers' PD was to boost their practices in the classroom for better performance of their learners. Ajani stated that student test scores on the regional examinations are supposed to get better and the number of teachers attending PD workshops should increase, the rate of college matriculation of students at USD is expected to increase because of the increased number of teacher PD initiatives. On the gap or relationship between teachers' practice and PD, Saleem (2020) noted that teachers' competence in the classroom is enriched by continuous PD which is indispensable and necessary for practice updates to cope with changes in educational

sectors. Unfortunately, USD staff in Liberia do not understand why that is not happening as they continue to intensify efforts by increasing the budget for PD, recruiting additional PD specialists, and offering incentives for exemplary attendance. In a personal meeting with the core staff of the urban school district, an administrator at the school district stated that little is known about why PD is not improving student learning and how to improve it (Administrator, personal communication, September 30, 2021). This situation suggested there was currently a gap in the practice among teachers which could affect the overall education sector of Liberia. An understanding of the local problem would change the way teachers' PD programs are designed and change teachers' behavior and approaches to general pedagogy.

Rationale

The rationale for this basic qualitative research was to understand secondary school teachers' perceptions of PD in an urban school district in Liberia. In addition to the former President of Liberia who thinks the education quality is poor, senior staff of the urban school district concurred that the district needs to improve its teacher PD program. According to a subject area supervisor at the school district, the total of four quarterly PD efforts made pedagogically to empower teachers to raise student test scores across the district has not met expectations (Supervisor, personal communication, September 30, 2021). My specific intention with this study was to collect and analyze data on the perceptions of eight secondary teachers at USD to acquire an understanding of how PD could be improved. Based on the rationale, the expected outcome of this study

was to collect data that informed the development of an outcome-based PD project for USD.

Definition of Terms

Andragogy: The science and practice of adult learning (Knowles, 1970). Knowles (1970) noted that, unlike pedagogy where students are led into learning, adult learning is facilitated because adults possess resident knowledge that can be applied to accommodate the new.

Effective PD: Structured professional learning that results in changes in teacher practices and improvements in student learning outcomes (Nawab & Bissaker, 2021).

Gap in Practice: A problem that exists in practice or an opportunity for improvement in at least one of the following areas: knowledge (does not know), skill (does not know how), and practice (does not do; Ajani, 2019).

Professional Development (PD): Continuing education and career training after a person has entered the workforce to help them develop new skills, stay up to date on current trends, and advance their career (Nawab & Bissaker, 2021).

Secondary Teachers: The structure of the education system remains is 2 years for early childhood education, 9 years for basic education, and 3 years for secondary education. According to the New Reformed Education Act, teachers at the secondary school level are referred to as secondary teachers (Liberia Ministry of Foreign Affairs, 2011).

Self-Directed Learning: Self-directed learning is a process where individuals take primary charge of planning, continuing, and evaluating their learning experiences (Knowles, 1970).

Transformational Learning: A process where individuals take primary charge of planning, continuing, and evaluating their learning experiences (Mezirow, 2018).

Urban School Districts: schools that are in and around the capital cities of the counties. These schools are easily accessible, contain adequate input and infrastructure for appropriate instruction, and learning environments.

Significance of the Study

This study is significant because it may contribute to the general field of education by presenting findings on an understanding of how the perceptions of teachers who attend PD can improve student learning outcomes. It may enable teachers, PD curriculum developers, and educational leaders to tailor relevant and suitable PD programs for their teachers. In addition to its position as reference for future researchers on issues that determine the success of PD, the study can be used to narrow existing gaps in teaching practice at the urban school district in Liberia. This study will contribute to Liberia's educational knowledge which will also help the whole West African region gain clarity as no information is currently available about research conducted on the effectiveness of PD initiatives. The purpose of this qualitative study was to explore Liberian secondary teachers' perceptions on the strength, weakness, and recommended improvements of the PD at USD.

Research Questions

There exists a large volume of research literature in Western countries on the effectiveness, benefits, and approaches of teacher PD. Previous researchers have stated that the effectiveness of PD is identified by improvement in student academic performance, differentiating contents based on the unique needs of teachers, and analyzing the way of thinking about PD (de Vries et al., 2022). While those findings contribute to the designs of effective PD in Western country education systems, there is a shortage of research literature on the perceptions of teachers on PD in school systems in African countries. Since the problem I addressed was that teacher PD in USD is not improving teaching, and the purpose is to explore Liberian secondary teachers' perceptions on the strength, weakness, and recommended improvements of the PD at USD, the following research questions guided the study:

RQ1: What are Liberian secondary teachers' perceptions on the strength of the PD at USD?

RQ2: What are Liberian secondary teachers' perceptions on the weakness of the PD at USD?

RQ3: What are Liberian secondary teachers' perceptions on the recommended improvements of the PD at USD?

Review of Literature

Conceptual Framework

The conceptual framework that guided this study was Mezirow's transformative learning (Mezirow, 2018) or TL theory which is closely related to self-directed learning

(SDL), critical reflection (CR), transformation and integration. According to Mezirow's TL theory, the way learners interpret their sense and experience is central to making meaning of their learning. TL is fundamentally concerned with construing meaning from experience as a guide to action. TL identifies critical reflection, making experiences central to content, and rational discussion as components that support learning. SDL is a learning strategy that allows adult learners to take charge of their learning process or in simple terms, dictate what they want to learn and at what pace (du Toit-Brits, 2020). Garrison developed an SDL model in 1997 that identified self-management wherein adults control tasks that concern the enactment of learning goals and the management of learning resources and support (Leong, 2020). Other 21st-century researchers recognized the importance of SDL to adult learning. du Toit-Brits (2020) noted that self-directed is an imperative skill for learners and meets the demands of today's educational atmosphere and is indispensable. In adult education, the concept of self-directed learning has immense importance. It entails individuals taking initiative and responsibility for their learning (Leong, 2020). Morris (2019) noted that a key humanistic feature of SDL is that learning objectives are suitable for personal growth and not only academic performance as is the central goal of pedagogy.

Knowles (1970) is the main educator behind the theory of adult learning. In 1968, he developed andragogy as a new label and technology of adult learning to distinguish it from pedagogy or preadult schooling. Andragogy, therefore, became the key point for the justification of adult education as separate from other areas of education. TL and SDL as adult learning theories have exhibited embodiments of strong features of appropriate

tools to improve teachers' PD and improve student creativity. Mbeau-ache et al. (2022) noted that including components of SDL in teaching for students on the access to higher education (AHE) course might be beneficial in improving their overall achievement. Even though research on SDL shows that teachers prefer independence in their adult learning process, additional research is required for a definitive position on their respective benefits and efficacies. Three key elements of TL framework are andragogy, SDL CR.

Andragogy, SDL, and CR theories were appropriate for this study because they embody aspects of the commonly used adult learning theories. According to Knowles (1970), the modern practice of adult learning should be characterized by the facilitation of participatory learning instead of top-down didactic methodology so that teachers can apply experiences to construct knowledge. He further stated that SDL is a process in which adults take the lead in diagnosing and implementing their relevant learning needs with or without assistance. Designing education for future professionals requires an understanding of how SDL develops in teams (van Woezik et al., 2021). As a cluster of adult learning, Mezirow (2018) connected TL as a constructivist orientation that facilitates adults to reflect on and discuss their assumptions about the world to shift their frame of reference or learning. SDL as an element of andragogy is a way for adult learners to improve learning and gain greater experiences within settings that are ideal for problem-based skill-building. Knowles identified the benefits of SDL as the promotion of the natural development of self-confidence, initiative, perseverance, and life satisfaction (van der Walt, 2019). A quantitative study of teachers' preference between traditional

didactic learning and SDL showed early and late-career teachers preferred SDL more than mid-career teachers (Louws et al., 2017). A TL conceptual framework situates this study because its elements are focused on adult learning which is at the core of this study: To explore the thinking of a group of adults who are teachers, so that their PD or teaching practice and learning program can be improved. Results will offer data and resources regarding adult learning methods and procedures that school leaders and PD coordinators can use as options in constructing adult learning or teachers' PD at the urban school district. Adult learning theories have proven to be effective tools for delivering PD. Research by Prandini and Bacongus (2020) showed the application of Mezirow's transformative learning allowed Filipinas to gain agency by combining what is needed for their lives at the same time endeavoring to take care of their families. Leong (2020) confirmed that Knowles self-directed learning is an important piece of knowledge forming mosaic which supports individuals taking initiative and responsibility for their PD and learning. The TL conceptual framework is aligned with the components of the study because it subscribes to the common concept of adult learning and self-directed learning.

According to Morris (2019), self-directed learning is a fundamental competence for adults living in the modern world, where social contextual conditions are changing rapidly, especially in the digital age. The major research problem was also focused on the limited understanding of the gap in practice between teachers' PD and the poor student academic performance situation. The framework was aligned with the purpose statement as it was an exploration of perceptions on why the understanding of the poor student

academic performance is so little, despite the appropriate massive deployment of PD resources in an urban school district.

CR is a theoretical construct and reflective practice which has played a significant role in the theory TL. As a reasoning process to make meaning of an experience, CR is descriptive, analytical, and can be articulated orally, artistically or in written form (Hyde, 2021; Taylor, 2017). As a component of Mezirow's TL, Taylor (2017) identified five intricately linked that reveal understanding of the levels of CR and differences in formal and facilitated settings as (a) the need for a CR standard, (b) journaling and CR, (c) quantitative assessment and (d) CR emotions and CR, and (e) the practice of CR. Hyde (2021) noted that Mezirow's theory of TL is closely linked to ontological and epistemological acts that support an individual's critical reflection. He further noted that adult education facilitators should be aware of the theory that positions these concepts for their choices in designing learning activities can be grounded and allows an individual to develop greater self-awareness, engage in ongoing learning, and improve practice.

Integration and transformation like CR can play critical roles in articulating Mezirow's TL theory when sufficiently applied. Matsuo (2019) argued that individual unlearning as a stand-alone is critical in promoting higher-order learning; however, it promotes integration due to its role as mediator of the relationship between CR and unlearning just as CR mediates between reflection and unlearning. The minds of preservice teachers can be opened to realities of teaching and social justice practice through critical reflection because teachers often enter practice with narrow perspective of teaching (Kruger & Buley, 2022). K. Liu and Ball (2019) argued that community-

based teacher preparation grounded in CR facilitates and promotes transformative teacher education. According to the authors, the limited success in teacher preparation was due to policy changes that prioritized recruitment and over retention. As mitigation, the authors proposed the integration of critical reflection and generativity for transformative practices in the classroom.

Review of the Broader Problem

In this section, I positioned the research questions in the broader literature of the importance of TL and SDL, teacher perceptions of PD, and research-based definitions of effective PD. As further alignment effort, the review was divided into two main sections: (a) conceptual framework, and (b) review of the broader problem which are supported by six subsections that present details and include: (a) the key purpose of teachers' PD (b) applications of TL and sSDL strategies in relevant disciplines where adult learning is applied, (c) professional arguments over the effective of the TL, (d) teachers' perceptions of PD, (e) factors that identify effective PD, and (f) PD challenges in the Liberian education sector.

The following topics and keywords were used for searching *PD, continuous PD for teachers, adult learners, teacher perceptions of PD, professional learning, andragogical approaches, self-efficacy, challenges in conducting PD, adult learning styles, types of PD, characteristics of effective PD, and professional learning with impact.* Walden University's library resources and Google Scholar were the key search engines used to access the relevant literature and databases. The databases that were searched

were SAGE, ERIC, Google Scholar, EBSCO, and other peer-reviewed articles from 2018-2022.

Results of a study by Meesuk et al. (2021) to evaluate the causes and effectiveness of a PD program in the form of professional learning community (PLC) as a form of SDL showed PLC was essential for teachers and education personnel. PLC served as a shift on perceptions of educators. There exists a huge volume of research findings and literature on teacher PD in the Western world. Due to this availability, researchers have unfettered access to information they set out to glean to corroborate their hypothesis and research focuses. Some of the available research information highlights the need for improvement in PD and teaching practice, others reveal current information on best practices and effectiveness of PD and others present challenges in the PD implementation and ways forward for mitigation. The emerging theories are usually focused on quality teaching practice with its resultant quality education.

Despite the situation in the Western world where research literature on PD is abundant, there is currently a shortage of research-based information on teachers' PD in some African countries, including Liberia. According to Fussy (2019), there is a global call for universities around the world to generate relevant knowledge via research to contribute to social change; however, the involvement of African universities and academics is minimal. The effect of this shortage is that it presents researchers with an option to reference more general Western country findings and the closest information on PD and make connections with the traditional African teachers' PD. My strategy for conducting this literature review was to identify emerging themes by drawing

connections between teachers' perceptions of PD, and existing research findings on PD effectiveness and challenges. This strategy was the best fit for the literature review because the purpose of the study was to explore secondary school teachers' perceptions of PD in an urban school district as to the reasons why PD was not achieving its intended outcome of improving teaching and learning.

Research shows interdisciplinary applications of TL and SDL strategies are not limited to regular academic education systems but accommodate the purposes of PD in several disciplines. While TL and SDL theories for PD are widely applied in regular academic teaching and learning settings, they have proven to be successful and effective in many other areas including healthcare and technology (Avsec & Savec, 2021; Bernard, 2019). Reports on different approaches to TL show that in nursing education and other healthcare disciplines, there were benefits, and successes in the application of TL theory.

Purposes of Teacher PD

A key purpose of PD is to ensure continuity in learning as a lifelong process (Abbiati et al., 2022). According to Nawawi (2018), the purpose of PD is for teachers to stay abreast with current curriculum changes, to improve their skills and knowledge, and to promote student achievement. PD progressively influences teacher performance and changes student learning behavior. When individuals are professionally developed, their output improves. For teachers, the purpose of PD is to improve knowledge and skills to facilitate individual, school-wide, and district-wide improvements to increase student achievement. PD is intended for academic purposes because its goal is to improve pedagogy (Havea & Mohanty, 2020; J. E. Liu et al., 2020).

PD is intended to enhance teacher efficacy through the possession of skills to develop teaching strategies that will improve student learning (X. Liu et al., 2022; Schwab et al., 2021). This can be accomplished by shifting the pedagogical focus from content knowledge to more self-actualizing characteristics such as practices including interpersonal and critical reflection to create awareness and find meaning. A study intended to identify perceived PD needs of novice English for Special Teachers (EST) showed that the teachers did not know how to cooperate with the faculty to promote higher thinking among their students (Bayram & Canaran, 2020). PD is intended to target teacher needs, reflections, and challenges (Abbiati et al., 2022). There is enough research literature which confirms that effective PD programs are key to teacher efficacy and improvement in student learning. Although this assertion is true, teacher PD has not attained success without challenges. Standardization of PD is a factor of effectiveness; however, according to Larsen and Allen (2023), professional learner identity developers must consider the significance of balanced and measured acknowledgments of casualty to PD. Collaborative structures benefit all forms of teacher PD (Richter et al., 2022) but teacher collaboration is an important feature of job satisfaction and self-efficacy for teachers and leads to higher student performance.

High school English as a foreign language (EFL) teachers faced various challenges in a program they were taking. Alenezi et al. (2022) noted that lack of teacher preparation and training, English curriculum deficiencies, and teachers' English proficiency level emerged as key challenges faced by kindergarten teachers who teach EFL. This suggested that PD should be revised according to EFL teachers' targeted

needs, reflections, and challenges. Lorente-Echeverría et al. (2022) noted that the key challenge for PD programs is that priority is not placed on making them interdisciplinary, holistic, and on active methodology-based programs that integrate deep changes throughout education to address the question, “Are there elements that facilitate or hinder the development of curricular sustainability?” The emerging themes from a systematic review identified challenges such as a lack of knowledge about sustainability competencies, a lack of training in education for sustainable development (ESD), a lack of systemic and creative thinking, and a need for ESD training to enhance knowledge and to develop sustainability competencies. Discrimination and segregation are also among factors which challenge PD. From the history of South Africa, teacher education contains challenges, consequently, many more resources and willpower would be required for the education sector to attain the expected standards (Smith, 2018). Challenges posed by the COVID-19 crisis to teaching, learning, and PD do not seem to be fading at an appreciable pace and have compelled educational institutions to reconsider administrators to transition to innovative online and mobile means (Bailey et al., 2022). This transition suggests a reevaluation of PD programs. That situation of the elevated level of teacher PD participation but the minimal impact of PD on teachers' instructional practices is one of the serious challenges to PD (Abdul Rahman, 2021).

Transformative Learning Strategies in PD

There is a tendency for teacher education to focus more on content knowledge than pedagogy and hence produce deficient PD outcomes. This is often generated by the condition where prospective elementary mathematics teachers believe they already know

enough math to teach elementary math. Johnson and Olanoff (2020) noted that much of PD knowledge is on procedure and lacks depth and conceptual understanding and hence, proposed a cycle of transformative learning theory that incorporates TL strategies into mathematics content knowledge. The authors further suggested that mathematics teacher education should adopt TL as a key strategy of andragogy, and through TL, learners should participate in a process that is individually need driven. TL has proven to be usable in diverse teacher improvement programs as stand-alone or integrated. Stebick et al. (2023) agreed that teacher inquiry is one way to accomplish a teacher's PD goals but maintained that peer collaboration promotes growth, self-directed learning, and transformative learning. Unnanantn (2022) proposed that the English assessment ability of preservice teachers can be developed, and their transformational change levels improved while implementing Mezirow's TL.

Self-Directed Learning Strategies in PD

According to van der Walt, (2019), the term self-directed learning was ascribed its initial definition in 1975 by Knowles and later acquired a range of diverse meanings based on the discipline in which the SDL activities were applied. While Knowles and colleagues were correct in ameliorating the "process part" of the definition of self-directed learning by emphasizing the freedom and agency of the learner as steward of creation, researchers wishing to deviate from perceptions of SDL were compelled to explain what the term designates in their project (du Toit-Brits, 2020; Zhu & Kadirova, 2022). This situation led to communication difficulties and the discourse generated several conclusions about the application and definition of SDL. When SDL theory was

applied, learning activities for courses in vocabulary acquisition and translation were reported more than courses in basic literacy (Lai et al., 2022). Online differentiated instruction has a significant impact on the academic achievement of preservice teachers, while it did not create a significant difference in terms of total SDL readiness. Teacher educators should provide preservice teachers with enough support to improve their SDL readiness (Özüdoğru, 2022). To involve students in inquiry learning to counter disengagement from learning, middle school teachers need to develop students' self-directed learning (SSDL) skills to empower them to take control of their learning (Van Deur, 2021). Using the K-SSI instrument for assessing Korean nursing students, results showed nursing programs need to consider factors of SDL to achieve self-directed goals in students attending online classes (Park et al., 2023). Students can learn how to become self-directed learners when lecturers tailor teaching to their needs, with scaffolding, and considering their respective levels of intelligence or critical thinking abilities (Mann & Willans, 2020).

TL as Simulation-Based Learning in Healthcare Disciplines

Mezirow's transformative theory is usually not a stand-alone construct due to its 10 components or phases which are aligned with other adult learning strategies. Briese et al. (2020) noted that TL phases closely mirror simulation-based learning (SBL) although there are assumptions that limitations should be considered when applying TL to SBL. The similarity between TL and SBL is that both use experience. As an adult learning strategy, SDL is widely used for training healthcare and medical students (Campos-Zamora et al., 2022; Ozone et al., 2023). It is defined as a learning strategy based on

experience that offers learners real-world- like opportunities to develop their knowledge and skills in mock situations. With an aim to synthesize existing evidence on the effectiveness of transformative learning theory in nursing and healthcare education, Ryan et al. (2022) investigated six data sources and employed the population concept context (PCC) to find literature relevant to their goal. Ten of the documents reviewed were in nursing features, and eight in medicine and various allied disciplines. The investigators concluded that in the nursing and healthcare disciplines, TL is effective because there are indeed benefits, and successes in the application of TL theory especially in the design of learning modules and curricula, and program evaluation (Ryan et al., 2022).

A qualitative case study by Bernard (2019) to review the effectiveness of TL generated five themes that contributed to discourses on the effectiveness of transformative learning in nursing education. The purpose of the study was to explore the learning experiences of 11 nursing educators who employed TL teaching. Five learning activities identified as TL driven strategies: (a) teaching outside the box, (b) who is in charge? (c) seeing is believing, (d) finding the balance, and (e) stepping off the stage. The implication of the study was that the five themes revealed previously hidden applications or phenomenon of TL strategies in nursing education. Briese et al. (2020) maintained that simulation fosters transformative adult learning, and that TL can be useful in helping SDL facilitators acquire useful understanding of simulation in adult learning situations. Conducting qualitative interviews with 17 healthcare professionals (HP), Ong et al. (2022) concluded that healthcare professionals can change the way they train by adopting TL perspectives for faculty development. Using TL survey strategies to evaluate the

process and outcomes TL in the health profession with students and house staff at a medical center during the COVID-19 pandemic, Vipler et al. (2022) found that the most prominent TL outcome was self-awareness, acting differently was intermediate, and openness and worldview shifts were lowest. They also noted that students were more likely than house staff to undergo transformative learning. Vipler et al. recognized TL as an educational theory in which an individual's worldview is fundamentally altered through conscious reflection (cognitive rational), insights (extrarational), or social reform.

Transformative Learning Strategies in Educational Technology

Transformative learning has two basic focuses or ways of learning which are instrumental learning and communicative learning (Mezirow, 2018). Instrumental learning focuses on task-oriented problem solving, and evaluation of cause-and-effect relationships, and communicative learning focuses on how people communicate their feelings, needs, and desires (Mezirow, 2018). He propounded that andragogy establishes professionally designed ways of learning and communicating, and transformative learning serves as the frame. Adult learners can have well-established 'ways of knowing,' so a process of transformation represents learning that challenges them to discover new ways of thinking. TL is thus a frame for the practice of adult educators. In communication, affordances of technologies can be exploited to facilitate TL in adult learning contexts (Wang et al., 2021) but is however, not consistently applied in the four recognized epistemological stances.

Despite the huge insight Mezirow's framework continues to present for educators and identify the critical questions around technology-enhanced learning in current day educational settings, PD activities to support fellow lecturers to use technology in their teaching are focused on tools and techniques instead of fortified pedagogy and assumptions (Moore & Bovill, 2022). As a covert benefit, the devastating effect of the COVID-19 pandemic in Africa generated several groundbreaking research studies. A South African researcher, Shaik (2023) explored the dilemmas of three early childhood care and education (ECCE) in Cape Town, using Mezirow's TL as the analytical framework to analyze the data. The results showed that in situations where ECCE teachers were faced with disorienting dilemmas of digital equity, they also adopted other ways to engage in dialogues and shared negotiations to ensure that the ECCE centers continue to operate in solidarity with children and parents.

African Experiences of TL in Educational Technology Strategy

Over the past six years from Y2015 to Y2022, there was almost zero research-based documentation in Liberia to show Mezirow's transformative learning theory in technology as a widely accepted learning enhancement tool was officially or consciously applied in teacher training or other adult learning programs (Moore & Bovill, 2022). Despite this absence of research-based documentation, there are indications that TL strategies were applied in some adult learning facilitation processes. In Liberia, teacher training as a requirement concludes with practice teaching and field experiences which are simulation-based learning (Briese, et al., 2020); group research and presentation are some of the practical adult learning activities that mirror TL. Despite the indications of

subconscious TL practices, attempts to launch standardized TL strategies in Liberia has not met expectations as indicated by two national ventures.

First, in response to its education privatization venture the Liberian Government launched an ICT pedagogy project in Y2016, as one of the 10 beneficiary African countries of the US\$4 million offered by the UNESCO-China-Funds-in-Trust (CFIT) in teacher training (Klees, 2018). To strengthen its national teacher PD in technology strategy, the Liberian Ministry of Education launched information communication technology pedagogy (ICTP) enhancement centers at four sites including its three traditional rural teacher training institutes (RTTI) to enhance teaching and learning. The goal of the project was for teachers to acquire technological skills to make teaching and learning easy. The project stalled midway due to substantial gaps in TL and SDL orientation among teachers. Some teachers had never heard nor applied TL and SDL as an adult learning theory and others demonstrated possession of significant TL and SDL strategies application skills unknowingly. Second, to support the ICTP project, the “Liberia National Policy for Information Communication Technology in Education Y2019 -Y2024: Framework for ICT-Based Educational Services Delivery” was launched in Y2019 (UNESCO-CFIT, 2019). Despite the policy’s clear mission to ensure that non-formal and formal educational institutions in Liberia produce citizens who can effectively use ICT tools and resources to develop the necessary skills, there are no indications that PD programs are including technology components in their curricula.

Professional Arguments on Mezirow's TL

In the PD arena, Mezirow's TL has proven to be effective in many adult learning situations; however, it has not survived without scrutiny and professional arguments. From his professional position, Perry (2021) argued that instead of the vague conceptualization of affect's role and the interchangeable treatment emotion and feelings in most adult learning scholarships, John Heron's whole person theory is preferable because it grounds all experiences in affective knowledge. He further asserted that the distinctions present challenges to Mezirow's transformative learning theory by revealing several gaps including critical subjectivity as prerequisite for critical reflection. In support of Mezirow, Hyde (2021), and Hoggan and Kloubert (2020) held that Mezirow's theory **of** transformative learning is a constructionist, ontological act that serves to support an individual's critical reflection, which, in turn, is a constructivist, epistemological act. Hyde (2021) concludes that andragogues should be aware of the theory underpinning the concepts of epistemology and ontology so that, their choices in designing learning activities is supported by **theory**, enabling them to facilitate expected adult learning outcomes.

Teachers' Perceptions of PD

Perceptions usually create negative or positive reactions to a construct or issue, and as a result, the thinking of an individual develops their behavior (Power & Sorby, 2020). In education, research findings continue to show the types of perceptions teachers harbor about PD and how those perceptions impact teaching and learning (Fotopoulou & Ifanti, 2018). Spoon (2018) explored beginning and mentor teachers' perceptions towards

a campus mentoring program and the mentor's match with a new teacher. The resonating theme of that study showed teachers carried a disjointed perception of classroom practices and the teaching profession. Consequently, it was recommended that beginning teachers be assigned mentors in their first year of teaching and receive support for at least the first 2 years to build their confidence and improve efficacy. This study generated conversations over how new teachers could be processed and integrated with veteran teachers in PD programs.

Perceptions of teachers are key in PD assessment but how students feel or think about their teachers' efficacy may also be important (Avsec & Savec, 2021; Daga et al., 2023). The perceptions teachers hold about PD are usually different, both negatively and positively. Teachers' perceptions of PD differ from situation to situation. A study by (Avidov-Ungar, 2023) showed PD developers should consider the intrinsic and extrinsic motivations to engage in PD and whether their developmental aspirations concern their professionalism as teachers or their careers within the education system. To achieve dependable success in constructing and managing research-based education, Bergmark (2023), proposed that teachers' professional learning entailed changes in perceptions regarding teaching research and collaboration as key.

In a study involving student participation to describe and compare the competencies of primary school teachers, it was revealed that differences exist in the competence of schoolteachers. As a result, it was recommended that all primary school teachers must continuously increase their competence to help students enhance their skills more effectively. Teacher educators who are at the front of designing teacher

capacity enhancement interventions have different perceptions of PD as shown in a study by Tyagi and Mishra (2019) to compare perceptions concerning experiences and the nature of serving institutions in an In-Service Teacher Education (INSET) initiative. The authors concluded that most of the continuous PD was like INSET and other initiatives such as workshops and seminars were simply components of INSET. PD is a factor that changes the perception of pedagogy. A study by Mustafa and Paçarizi (2021) explored perceptions of English as a Foreign language (EFL) teachers in Kosovo to understand how they felt about the existing PD approach. The researchers reported that teachers thought PD was effective because it changed their teaching practices and perceptions.

An important concern about PD services is whether the interventions are effective or not. It is simply not enough to measure the effectiveness of PD and the proficiency with which it is delivered or the number of sessions it contains. This concern hovers over PD and curriculum leaders because PD effectiveness is usually measured by student performance as a major benchmark. An effective PD program equips teachers with skills to cope with student behavior problems in regular classrooms and in inclusive classroom situations. To cope with students' behavior problems, which is a frequently encountered as a problem within inclusive education implementations, teachers often require some form of in-service training (Gezer-Demirdağlı & Cavkaytar, 2022). To determine the **effectiveness** of a behavior problem PD program, it must be explicitly designed for teachers of inclusive education. According to Nawab and Bissaker (2021), the effectiveness of a PD program can be determined by contextual factors. In a study to explore the perceptions of key stakeholders in rural Pakistan to understand the contextual

factors influencing the **effectiveness** of continuing PD programs for teachers, the outcomes highlighted several significant contextual factors which influenced the possibility and quality of CPD such as approaches to gender. Since CPD providers intervened without considering those contextual factors, the existing CPD program for teachers in rural Pakistan has been less successful in positively impacting the practices of teachers. Incompetent and demoralized primary school teachers can be the main cause of ineffective PD and poor primary education. To overcome this issue in Pakistan, PD was provided by primary school teachers and followed by a study to determine whether this new teacher training program was effective or not, as perceived by primary-level teachers. The findings revealed that most primary school teachers showed a positive attitude toward continuous PD programs (Saleem et al., 2021). The significant recommendation points were that continuous PD may develop better interaction between students and teachers, and continuous assessment should be included to improve the learning skills of students.

Factors That Identify PD Effectiveness

Research has identified several factors that contribute to the effectiveness of PD opportunities in **schools**, including improvement of participants' knowledge, administrator support, incorporation of active learning activities, duration of PD, fostering coherence, timing, and competence of facilitators (Widodo et al., 2022). A case study by Palmer and Noltemeyer (2019) examined how six factors contributed to the effectiveness of Positive Behavioral Interventions and Supports (PBIS) training, whether there was a relationship between each of these factors, and the effectiveness of

these training sessions. Results revealed the effectiveness of the training was significantly related to the incorporation of active learning, level of coherence between learning activities at the training and structures in place at participants' **schools**, increase in knowledge, and training date.

The way teachers perceive the delivery style of PD can affect its effectiveness. In an ANOVA study conducted to determine if there was a difference in teacher perceptions among content-related variables, it was revealed that a similar procedure determined that participants perceived trainers who were in similar job roles within their school to be more effective (Widodo et al., 2022). Teaching is a profession that requires ongoing PD and learning; hence, Bates and Morgan (2018) identified seven elements that can make PD effective as follows: focus on content, active learning, support for collaboration, models of effective practice, coaching, and expert support and sustained duration.

Liberian Education Sector PD Challenges

The Liberian education sector is struggling from the aftermath of a 14-year civil war that caused massive destruction of infrastructure and human lives. Upon the cessation of hostilities, the civilian president, Madam Ellen Johnson-Sirleaf launched several specific initiatives to revive the economy and education sectors including privatization of 200 public schools which research showed is an effective mitigation means (Carrasco & Gunter, 2019). When statistics showed the health care sector had improved and the education sector was not performing leading to a suggestion by the President for an overhaul of the whole education system, several interventions including the development of an education sector plan (ESP) by the MOE emerged which included

a mandate for significant PD for all teachers. In 2022, UNESCO reported an acute shortage of trained teachers at basic, and senior high secondary levels. While pupil/teacher ratios remained modest in basic and senior secondary schools, trained teachers were in low supply, with the share of trained teachers ranging from 35 per cent in ECE, 45 per cent in primary, 31 per cent in junior secondary, and 26 percent in senior secondary (UNESCO, 2022). According to reports from the MOE Y2020 the average student teacher ratio (STR) is 11 generated by a total of 106,194 students and 9,646 teachers. There are 32 secondary schools and 350 secondary teachers in USD. The MOE prescribes 50 as the maximum class size; however, due to high demands and high increased enrollment of students, some class sizes are at least 75. As a component of the general school statistics, there are 35,150 students and 3,004 teachers in USD, generating a STR of 12. There is a shortage of instructional materials and other resources. Further, the introduction of technology is a challenge at USD due to absence of constant electric power, and financial and administrative challenges. In addition to the alarming rate at which untrained teachers enter the sector, a vast number of post war untrained substitute teachers who do not possess adequate content knowledge and pedagogical skills are teaching at all levels of the sector (UNESCO Education Sector Analysis, 2022). Despite the huge budget allotted for the PD of teachers, student academic outcomes have not improved as expected. Based on the low student academic performance, there is a groundswell of opinions that the presence of unqualified teachers is the key factor to the low learning outcomes in the education sector with little reference to the structure,

process, scope and content of the PD, and perceptions of teachers regarding PD as a benefit.

The Liberian education system is divided into 15 county school systems (CSS) managed by county education officers (CEO), and district school systems (DSS) managed by district education officers (DEO). The DEOs report to the CEOs but have authority to scout, vet, recruit and deploy teachers in their school systems as a means of decentralization and a pathway to effective monitoring and evaluation. Unfortunately, this arrangement has not yielded the expected outcome due to the sharp budget shortage, centralization of support and coordination by the country's Ministry of Education, and shortage of field-based staff. The issue of shortage of trained staff cuts across all districts and poses a challenge to student performance. As a result, individuals who do not have training and accreditations from teacher training institutes and teacher colleges are deployed in the school systems to teach to narrow the gap.

In the review of the literature, I reviewed the constructs and applications of TL with its component SDL and CR as the conceptual framework that grounds the project study. I surveyed constructs of effective PD that previous educators and researchers proposed and the perceptions that informed their views. Linking the existing situation in the urban school district where the local PD has shown needs for improvement, I further surveyed the findings of previous researchers to acquire an understanding of how they construed effectiveness. In so doing, I discovered that the various findings had more similarities than differences; there was more agreement on what the definitions and necessary features of an effective PD entails. I also explored literature that conveyed the

types of challenges that school district PD leaders encounter in comparison to those that participants perceive as challenges. The literature review revealed that challenges differed by geographic location and other features. Research on how PD effectiveness is key to closing gaps in teaching practice were also studied to support the justifications of the commonality in the challenges that PD leaders and teachers encounter.

Implications

The purpose of this qualitative study was to explore Liberian secondary teachers' perceptions on the strength, weakness, and recommended improvements of the PD at USD. The findings of the data collection served as a platform for developing future PD projects for the urban school district. The findings also indicated whether the existing PD program should be strengthened to become more effective or replaced by a new PD project. Lepri et al. (2017) submitted that positive opportunities can be created through data-driven decision-making, but practitioners must also be aware of potential negative consequences they must address to truly realize potential emergent themes and social change. The result of the study will help faculty development staff at the urban school district design PD programs in response to the needs of teachers.

Summary

Section 1 of this project study explored the local problem at the urban school district regarding the perceptions among teachers and school leaders that the existing PD program is not producing anticipated outcomes. It includes the rationale for the study, a definition of terms used, the study's significance, and the research questions that will guide the study. In Section 1, I also discussed the conceptual framework and how it

aligns with my project study's purpose, as a component of the literature review. The literature review focused on themes that address unique features of effective teacher PD, challenges faced in implementing PD, and how teachers' perceptions impact PD. Section 2 details the research methodology and the tools I used to collect the data and analyze them. It also detailed the characteristics and number of expected participants, and the criteria used to select them.

Section 2: The Methodology

Qualitative Research Design and Approach

The research questions that guided the study were centered around teachers' perceptions about the PD offered by the urban school district. I explored perceptions; hence, I selected basic qualitative research instead of quantitative. Quantitative approach is used in the manipulation of numbers, applications of statistical software and formulas, and conclude by statistical inferences, while qualitative research analyses statements and draws meanings from statements (Burkholder et al., 2020; Ravitch & Carl, 2019).

Two widely adopted research approaches, quantitative and qualitative, were briefly surveyed before an appropriate selection was made for this project study. A quantitative approach was not preferred for this study because of features that distinguish it from qualitative approach. Quantitative research is the process of collecting and analyzing numerical data while qualitative research data consists of words or pictures and a different approach to analysis (Babbie, 2017; Creswell & Creswell, 2018). A quantitative research approach can be used to find patterns and averages, make predictions, test causal relationships, and generalize results to wider populations (Burkholder et al., 2020; Ravitch & Carl, 2019). In quantitative research, the purpose statement, research questions, and hypothesis tend to be specific and narrow, and seek measurable observable data on variables; data is collected using instruments with preset questions and responses and collection are quantifiable; data is usually collected from a large number of individuals or population; quantitative data is analyzed using mathematical procedures called statistics, and interpretation tends to consist of results

with prior predictions and past research (Ravitch & Carl, 2019). Some of the common designs used in quantitative research are (a) experimental, (b) quasi-experimental, and (c) correlational. In an experimental design, dependent and independent variables are used. The independent variable which can be a practice or procedure is tested to infer the influence it has on the outcome or dependent variable. A quasi-experimental design sets out to establish a cause-and-effect relationship between an independent and dependent variable. It is “quasi” because it is not a true experiment’ it does not rely on random assignment and the subjects are assigned to groups based on non-random criteria (Thomas, 2017). In a correlation design, the researcher seeks to relate two or more variables to determine if they influence each other. It allows researchers to predict outcomes and can be applied using statistical knowledge based on calculating the relationship.

I selected a basic qualitative approach as the appropriate approach for this study. Basic qualitative research is an exploratory investigation of a complex social phenomenon conducted in a natural setting through interviewing for the purpose of explaining or understanding the phenomenon (Burkholder et al., 2020). Qualitative research refers to an approach which does not use numbers (Thomas, 2017). Qualitative research is a derivative of constructionism, phenomenology, and symbolic interaction because researchers who use it are interested in how people interpret their experiences, how they construct their worlds, and what meaning they attribute to their experiences or, to understand how people make sense of their lives and their experiences (Babbie, 2017;

Thomas, 2017). The feature that distinguishes basic qualitative research is that it collects data from a sole source by interviewing participants.

Basic qualitative design was selected because the intention of this study is to inquire about the experiences of participants through interviewing. In a basic qualitative study, the researcher asks broad questions to collect data consisting of words or statements from participants (Ravitch & Carl, 2019). The extracted words or statements from the interview transcripts referred to as codes are arranged into categories from which themes are identified. Analysis of the themes are produced as narratives and presented as conclusions drawn from the research (Ravitch & Carl, 2019; Thomas, 2017).

I also surveyed other qualitative designs and categories that were not appropriate for this study before making the selection. Burkholder et al. (2020) identified five main categories commonly used in the qualitative approach: (a) grounded theory, (b) ethnography, (c) narrative, (d) phenomenology, and (e) case study. Those categories were not preferred because they did not address the purpose of the study and the objectives of the research questions since a sole source data collection via interviewing will be used. Grounded theory was not selected for this study. According to Burkholder et al. (2020), grounded theory is a qualitative research design used to develop a theory from data inductively. It is an attempt to derive theories by analyzing related categories, patterns, and themes (Babbie, 2017). This means the researcher does not begin with a theory and sets out to support or rebut it; instead, they begin with an area of study and follow the relevant trend to arrive at a theory that evolves or emerges. The goal of this study was to

explore perceptions (deductive) to gain an understanding of a problem, and not to discover an emerging theory (inductive); it was not a suitable design for my study.

Ethnography is a qualitative research design that investigates the social interaction of users in a specific environment to acquire an in-depth insight into a bounded unit (Ravitch & Carl, 2019). Ethnography differs from a basic qualitative design because it requires long-term immersion in a cultural group to collect data (Babbie, 2017; Burkholder et al., 2020). Data collection in this project study was not long-term and did not include immersion; therefore, ethnography was not suitable for this project study. Both phenomenological and narrative researchers collect information from individuals; however, the difference is that phenomenological researchers collect data from multiple individuals while narrative researchers could relate to only one person from beginning to end (Burkholder et al., 2020; Ravitch & Carl, 2019). Data collection for this study was by interviewing multiple individuals but was not primarily based on storytelling; hence, narrative, and phenomenological designs were not suitable.

Participants

The criterion for selecting participants was purposive sampling. Thomas (2017) noted that purposive sampling is the best fit for qualitative designs because it establishes a platform to collect rich primary data instead of secondary data. Purposive sampling allows the researcher to select “individuals and sites for study because they can purposefully inform an understanding of the research problem and central phenomenon in the study” (Thomas, 2017). Sample sizes in basic qualitative studies are typically small (Burkholder et al., 2020).

I hoped to reach data saturation by interviewing 10 to 12 Liberian secondary teachers who are teaching ninth, 10th, 11th and 12th-grade students. The total population of teachers at USD was 3,004 with 782 secondary teachers. One hundred teachers were invited out of the 782 to participate in the study. It was hoped that at least 10% of the total invited teachers from any of the grade levels or subjects would respond or agree to participate in the study. At the end of the recruitment period, eight teacher volunteers participated.

Participants were secondary teachers who were interested in participating in the study and authenticated via the district records as eligible. The justification for inviting a higher number of science teachers was because of the shortage of science teachers, and the lack of interest in science disciplines among Liberian students. Over the last 5 years, at least 48% of USD students who sat the WASSCE failed science subjects (Odour, 2016).

The entire process of gaining access to the participants was centered around institutional review board (IRB) scrutiny of ethical issues and confirmation. This began with my committee members sending me progressive feedback on the proposal submissions. This was followed by feedback from the IRB and ethics specialist. Upon receipt of IRB confirmation, USD administrators suggested steps for access to the teacher participants.

According to Burkholder et al. (2020), to gather data from research participants, researchers must first establish rapport and build trust. To establish the research-participant relationship, I stayed in touch with the teacher participants via phone calls and

emails. When rapport was established between me and the participants, it generated rich data and ensured respect was maintained. Over the past 2 decades, I have been invited as guest to several events in this urban school district where the teacher participants are employed; however, I do not have relationships with any of them. To mitigate any form of bias and risk, I ensured individuals with whom I have past relationships did not participate. Before the interview I met with each teacher and established a rapport, explained my role as the researcher, and their role as participant and how they would assist in conducting the study.

For participants' protection, I complied with ethics of informed consent, confidentiality, and protection from harm or beneficence, which are the three basic principles of research ethics codes and regulations that emphasize certain conditions to protect participants (see Burkholder et al., 2020; Thomas, 2017)). In addition, I completed the CITI Program Basic Course for Doctoral Student Researchers. I presented consent forms to each participant and explained what their role would be as volunteers, and how the process would be conducted. Burkholder et al. (2020) noted that informed consent is an intent for participants to enter research at their free will or voluntarily with being fully informed about their roles and what it means for them to participate. I disclosed to participants information needed for them to make informed decisions (see Thomas, 2017). Following the disclosure and explanation of information about the study, I asked participants if they understood the explanations. Participants' whose responses were affirmative participated.

For this study, I initially selected to use implied consent instead of the regular informed consent forms. A consent that is inferred based on an individual's actions and the facts of a situation instead of an explicit consent form is referred to as implied consent (Burgin & Flynn, 2021). However, Walden University's IRB granted me permission to use a remote interview consent form. Each teacher participants selected their interview date and site. To further confirm this, I included in the emails, a statement that says: "Your willingness to select an interview date indicates your consent to participate in this study" There was a statement that they understood their participation was voluntary and that they were free to withdraw at any time without giving a reason and without costs, and that after the interview, they would receive copies of the informed consent forms that they signed.

For confidentiality, I concealed the identities of the research participants and took steps to protect them from being discovered by others (see Ravitch & Carl, 2019). Identifiable information about individuals collected during the process of the research would not be disclosed and that the identity of research participants would be protected through various processes designed to make them anonymous, unless they specifically choose to disclose their own identities (Babbie, 2017). I ensured confidentiality by securing the data in a password protected file. The data was stored in a digital folder in a professional manner to prevent unauthorized access. I used numbers to identify the participants, and the location of USD. The data will be destroyed after 5 years.

In research, beneficence is the term used for participants' protection from harm and ensure benefits of a study are maximized. To ensure protection from psychological

and physical harm such as retaliation in the form of harassment, loss of employment, or legal actions, researchers consider ways to protect participants from negative consequences that could arise from disclosing their actions or experiences (Babbie, 2017; Burkholder et al., 2020; Ravitch & Carl, 2019). This is important because participants may not always fully realize the consequences of disclosure outside of the research context (Babbie, 2017). To ensure teacher participants in this study were protected from harm, I acknowledged potential risks to them and took actions to diminish the risks and maximize benefits of the study. To protect the participants from harm I adhered to the ethical principles of informed consent and confidentiality. I also assured participants that honesty would be observed in this relationship and any information they gave would be confidential and would not be revealed to anybody else but Walden University and the researcher.

Data Collection

I initially proposed to use face-to-face and virtual interviews guided by an interview protocol to collect the data. However, due to political situations at the research site in Liberia, I conducted the interviews via ZOOM and later traveled to Liberia to conduct trustworthiness and member checks face-to-face. The primary data collected in this study were the perceptions of participants.

The data collection instrument for this study was semi-structured in depth-interviewing with 10 semi-structured questions. In-depth interviewing is a qualitative research technique that involves conducting intensive individual interviews with a small number of respondents to explore their respective perspectives on an idea, program, or

situation (Burkholder et al., 2020). An interview protocol is a tool used to show interviewing consistency (Ravitch & Carl, 2019; Roberts, 2020; Yeong et al., 2018).

With permission from each participant, I recorded responses to questions using a laptop computer. The responses were transcribed later for analysis.

To establish data sufficiency, I checked whether the responses given for the open-ended questions and the probes that followed were enough to answer the questions asked or not. In establishing qualitative data sufficiency, each question consisted of two statements with labels that sought a single answer (Young & Casey, 2018). The major advantage of data sufficiency is that the researcher does not need to solve the question but only to collect and analyze statements that are required to derive the answer to a given question (Sherif, 2018).

An interview protocol is reliable if it produces good quality interview data (Roberts, 2020; Yin, 2018). To establish sufficiency of the data collection instruments, I compared the interview protocol with the existing interview questions that related to the main research questions. The structure of my protocol followed the following format: (a) I used a script to open and close the interview (b) I ensured my questions were informed by existing research; (c) I introduced myself to the participants, (d) I began with questions that were easier to answer and then moved to more difficult or abstract questions, and (e) I always thanked the participants for their participation.

I originally had planned to collect the data within 2 weeks. To implement the process, I developed a plan that contained actions and indicators for the data collection process; however, it was built around IRB processes in acquiring preapproval and

subsequent approval to move to the next steps. Following approval from IRB, I mobilized planning and inputs for the study such as lunch money, and phone cards for the participants to conduct the interviews via ZOOM. The reason for providing minimum support to the participants is because unlike the Western world, many people living in postwar Liberia are faced with challenges in gaining access to common basic living necessities including access to internet connectivity and other communication means.

Data were generated by recording the interviews and transcribing the conversations. The rationale for gathering this type of data was to identify codes and themes that would inform final conclusions. Each of the selected participants was engaged as a key informant because they were interviewed separately, and provided information based on their unique respective experiences as teachers in the urban school district. The participants were given the options to select offsite locations. The reason for the offsite arrangement was to remove participants from their regular school environments to establish confidence and trust between the researcher and the participant. The interviews were conducted using open-ended questions.

A research log sheet and a typological system were used to track data in this study. I used the research log to document my research strategy and keep track of the sources searched. The typological system was constructed by grouping cases or participants into types based on their common demographics (Stapley et al., 2022). Typological analysis and deductive coding were the primary methods to track the data in this project study (Trainor & Bundon, 2021). I observed the following basic steps to construct the topology: (a) read the data and use color codes to mark entries related to

typologies selected; (b) record the main ideas in entries on a summary sheet and identify patterns, relationships, and themes within typologies for relationship; (c) read data and code entries according to patterns identified and keep record of what entries go with each element of patterns; (d) decide which patterns are supported by the data and search the data for nonexamples of patterns; (e) look for relationships among the patterns identified; and (f) write patterns as one sentence generalizations.

Role of the Researcher

My role as the researcher was to ensure the protection of all participants selected for the study. As the researcher, I conducted interviews and triangulation tests. I maintained rigor, and credibility, and addressed reliability of the study. I reduced bias, developed confidence in the methodology, collected and analyzed data, and presented the findings. I have served as consultant and guest speaker at the urban school district but did not have personal relationships with any of the participants. Before the interview I called by phone to each of the participants to establish rapport, explain my role as the researcher, and their role as participant and how they would assist in conducting the study. I explained the study in a narrative format without bias, conducted interviews properly, addressed data according to the design and analyzed the data with competence. During the interviews, I clarified the importance of the participant's role in the data collection process and developed a list of questions focused on the performance of the urban school district's PD program. I took notes during interviews, and then reviewed the notes to look for patterns. I audio-recorded each interview session using a laptop computer and cell phone to ensure the accuracy of responses.

Data Analysis

I used qualitative data analysis (QDA) to analyze the data for this study and thematic analysis approach to code the data (see Mohamed, 2022). Four frequently used steps in conducting QDA that I followed were (a) recording the interview and transcribing the interviews, (b) familiarization with the data, (c) comparison of the data sets, and (d) interpretation of the data (see Shaik, 2023). Data analysis involves describing, interpreting, drawing conclusions, and determining significance as important steps (Babbie, 2017; O'Kane et al., 2021). Content analysis, thematic analysis, narrative analysis, grounded theory, and discourse are the six commonly used QDA methods (Ravitch & Carl, 2019; Thomas, 2017). Thematic analysis was preferable for this study because it did not require the detailed theoretical and technological knowledge of other qualitative approaches and offered a more accessible form of analysis via coding, particularly for those early in their research career.

Data Analysis Process

A thematic analysis approach was applied by coding the data to see patterns and trends (see Belotto, 2018; Elliott, 2018; Shaik, 2023). This was done by the identification of codes, arrangement of codes into categories, construction of themes from the categories, and writing of the narratives. Babbie (2017) noted that a code is a label that describes a piece of content which can be a word, a statement, or a paragraph. It symbolically assigns a summative or evocative attribute for a portion of qualitative data. Qualitative coding is a process of creating and assigning codes to categorize data abstracts that will be used to derive themes for analysis. Two widely used types of codes

are deductive and inductive (Thomas, 2017). Deductive codes are predefined, developed by researchers, and drawn from the research questions. Deductive codes are referred to as *a priori* or codes identified in advance of the data analysis and inductive codes are those that emerge from the data or from the individuals interviewed.

Categorization of codes is the process of reviewing everything coded and grouping them or creating categories that can be used to guide future analysis. Similar or related codes are grouped into categories to help organize data effectively and used to identify patterns and trends that are later generated into themes. Themes are developed when a researcher takes what they have learned from coding and categorization and synthesizes them to draw meaning from the data and produces narratives based on the research questions (Ravitch & Carl, 2019; Thomas, 2017). Themes are used to capture things that are important to the data relative to the research purpose and research questions. I used hand coding to produce categories and themes for this study in two steps. The analysis process began with the development of a predefined set of codes based on the research questions and the conceptual framework of the study. For the initial coding stage, I familiarized myself with the interview transcript by reading it over to get a general overview of the data and an understanding of it. The initial stage was followed by line-by-line coding or reading the interview transcript line by line and using highlighters with assorted colors and identifying resonating, similar or related words, statements, or paragraphs. Assorted colors of highlighters were used to mark off statements or paragraphs that resonate, have similarities, and showed trends and differences. Following the identifications, the codes were grouped by color to form categories.

The final steps were the development of themes and writing of narratives. In thematic analysis, the researcher aims to identify themes, trends, or patterns in the data that are important or relevant and use these themes to address the research goal (Ravitch & Carl, 2019). Themes were developed from the categories by noting the patterns, resonating messages, statements, and trends. This was done by taking what was learned from the coding and categorization processes and synthesizing them. The themes were analyzed to draw meaning from the data to produce narratives based on the research goals and research questions.

Data Analysis Results

A professional development program (PD) launched to improve students' test scores in an urban school district (USD) in Liberia did not produce the expected results over a period of three years from 2018 to 2021. The administrators of the USD did not understand why this was happening. The purpose of this qualitative study was to explore Liberian secondary teachers' perceptions on the strength, weakness, and recommended improvements of the PD at USD. This study helped me understand the barriers that caused the gap between the PD and student test scores and provided a platform for the development of a modified PD project. I conducted one-on-one interviews with eight secondary school teachers who have attended at least two professional development workshops. to collect the data for this study.

The data collection and subsequent analysis process began immediately after I received my Walden University approval IRB # 10-02-23-0342591. I emailed the district administrators and received permission to gain access to the secondary school teachers to

conduct the study. Next, I emailed the principals and attached flyers to be placed at visible locations of the two high schools to start recruitment of volunteer teachers to participate in the study. From a total of 100 teacher volunteers who showed interest in participating by providing their contacts, eight teachers with different experiences were selected to participate in the interview.

Before generating the data, each of the participants were asked to read the consent form. I informed each participant of their rights and the voluntary nature of the interview. I told them that if they did not have any questions and agreed to participate in the interview they should respond and sign the consent form. All the eight volunteers responded with an “I Consent” statement, signed the form, and the interviews were conducted. I received permission from each participant to record the interviews and informed each that the voice recordings and transcripts would be accessible only to Walden University and the researcher. I conducted each interview based on a schedule developed in consultation with each participant. I utilized ZOOM platform assisted by a Read.ai transcript application. Each interview lasted for approximately 30 minutes.

Table 1

Participants’ Demographics

| Participant | Previous job | Level of education | Grades taught | Years teaching |
|-------------|-----------------|--------------------|---------------|----------------|
| P1 | College Student | MSc/BioTech | 10, 11, 12 | 10 |
| P2 | Journalist | AA Degree | 9, 10 | 9 |
| P3 | Petty Trader | AA Degree | 9, 10 | 5 |
| P4 | Architect | BSc Degree | 8, 9, 10 | 12 |

| | | | | |
|----|-----------------|----------------------|-----------|----|
| P5 | College Student | BSc Degree | 9, 10, 11 | 20 |
| P6 | College Student | BSc Degree | 11, 12 | 3 |
| P7 | College Student | College Sophomore | 9, 10 | 18 |
| P8 | College Student | College Senior | 9, 12 | 4 |

Process of Generating and Recording Data

The data were generated from eight secondary school teachers who expressed interest in the study and volunteered to participate in semi-structured interviews. The interviews were recorded via ZOOM and Read. Ai. transcription application. The semi-structured interviews were audiotaped using a computer laptop and transcribed for accuracy. The interview protocol was a self-designed instrument containing 10 open-ended interview questions. The open-ended questions offered teacher participants opportunities for participants to tell their teacher stories, and share their experiences and perceptions of the existing PD. Each of the participants were asked the same 10 questions. Before the interviews, I obtained permission from each participant to do voice recording. As the interviews were being recorded, I took notes.

The three research questions for this study were: (1) What are Liberian secondary school teachers' perceptions of the strength of the PD at USD?, (2) What are Liberian secondary teachers' perceptions of the weakness of the PD at USD?, and (3) What are Liberian secondary teachers' perceptions of the recommended improvements of the PD at USD? Table 2 organizes the relationship between the three research questions and the 10 interview questions.

Table 2*Related Interview Questions*

| Research question | Related interview questions |
|--|--|
| RQ 1: What are Liberian secondary school teachers' perceptions on the strength of the PD at USD? | <ol style="list-style-type: none"> 1. What were you doing before becoming a teacher? Total years as a teacher? Probe: How many years at this school? Probe: What is your highest level of formal education or teacher training 2. Please explain in your own words your understanding of PD and some of the strategies usually applied by your facilitators. 3. Please share with me what you perceive as some of good qualities of the PD you attended. 4. In at least two of the PD you attended, what do you think were things that went well and benefited you professionally? (Ex: Facilitators capacity, content, facilitation strategies applied, etc.) 5. What relationship do you see between PD and student test scores? 6. What change have you seen in the way students react to teaching strategies you acquired from professional development? |
| RQ 2: What are Liberian secondary teachers' perceptions on the weakness of the PD at USD? | <ol style="list-style-type: none"> 7. In at least two of the PD you attended, what do you think were things that did not go well or that did not benefit you professionally? (Ex: |

| Research question | Related interview questions |
|---|---|
| | Facilitators capacity, content, facilitation strategies applied, etc.). 8. Are there barriers in applying what you have learned from your PD in the classroom? |
| RQ 3: What are Liberian secondary teachers' perceptions on the recommended improvements of the PD at USD? | 9. Considering the two PDs you attended, what do you think could have been done better regarding learning activities and facilitation strategies to specifically meet your PD needs? 10. As a beneficiary and participants in the PD activities of the USD, what are those aspects that should retained and those that should be removed? Probe: Why do you think so? |

Coding Process

For this study, I used qualitative data analysis and thematic coding to code and analyze the data. The transcripts were coded with a list of four predefined deductive codes derived from the research questions and conceptual framework. Inductive codes that evolved were aligned with the deductive codes and utilized to identify foundational patterns and salient data. After recording the interviews, I reorganized and evaluated the eight transcripts for accuracy by five major steps. Initially, I familiarized myself with the data by reading each of the transcripts at least two times. Following the familiarization, I used color highlighter pens with assorted colors and manually generated the codes. Each code had a distinct color. The codes were words, patterns, and quotation related to the

research questions, the research problem, and the conceptual framework of the study. I later grouped related codes into categories to identify and define themes. After defining the themes, I explained the implications of the themes by writing the narratives for the study.

Findings

The core problem the study sought to understand was why the district PD was not improving student test scores as expected. The findings from the analysis provided insights into the three research questions that sought to explore teachers' perceptions of the strength and weakness of the USD PD. The interview questions presented opportunities for participants to share experiences of the professional developments they have attended. I used a simple Microsoft Excel spreadsheet to record words, patterns, quotations, and placed them under categories. Evaluation of each of the categories generated seven themes. Table 3 presents the codes and themes aligned with the RQ's.

The purpose of this qualitative study was to explore Liberian secondary teachers' perceptions on the strength, weakness, and recommended improvements of the PD at USD. I developed predefined or deductive codes based on the USD research problem, the research questions, and the adult learning conceptual framework which grounds this research. The deductive codes significantly helped to check my biases regarding the initial information I received from district officials about the USD PD. I used the predefined codes and inductive codes that evolved from the interview transcripts and derived the following themes.

Table 3*Themes and Codes*

| RQ's | Codes | Themes |
|---|--|---|
| RQ 1: What are Liberian secondary school teachers' perceptions of the strength of the PD at USD? | Teaching skills Knowledge Helpful instructions. Education Education quality | Articulation of PD goals Benefits of teacher PD |
| RQ 2: What are Liberian secondary teachers' perceptions of the weakness of the PD at USD? | Resources Gaps Instructional materials Non-participatory Classroom methods | Research-based learning strategies Shortage of resources Teacher centered facilitation. |
| RQ 3: What are Liberian secondary teachers' perceptions of the recommended improvements of the PD at USD? | Professionalization Resources Libraries Teachers' longues | Nonconventional learning strategies Access to resources |

RQ1: What are Liberian secondary school teachers' perceptions of the strength of the PD at USD?

The first research question sought to obtain teachers' perceptions of the strength of the USD PD, thus, the interview questions were based on their qualifications and experiences as teachers, and their perceptions of the quality of the existing PD, what it should contain, and the purpose for which it was rolled out each semester. Based on RQ 1, the teachers were asked about their former profession before becoming teachers and to explain in their own words what they understood as PD. This research question was designed to provide an understanding and insight to the experience of the teachers. The interview questions (IQ) prepared to respond to RQ 1 were from IQ 1 to IQ 6. The analysis showed that teachers who had more than five years of teaching experience gave an overall negative rating of the USD PD while teachers with at most five years give fair ratings.

Theme 1: Articulating Understanding of PD Goals

Resonating codes which supported this theme included the following: (a) PD is intended to improve classroom management skills to cover up for the shortage of resources which limited in our district to improve teaching, and (b) PD enables teachers to pass knowledge on to the younger ones. Participant 5 presented her understanding of PD by saying,

A teacher's professional development has to do with added knowledge to the field of education in any aspect. It could be classroom management, It will be supervision, it could be teaching strategy, but professional.

development that you go through adds knowledge to the existing knowledge.

that you must have, as a teacher.

Participant 3 stated, “Professional development has to do with, our professional knowledge as regards what you want to do professionally, especially when it comes to our own areas to teach, you have to be a professional teacher.” Similarly, Participants 8, and 4 defined PD as a means of increasing knowledge for better teaching practice.

Participants 6 and 1 indicated that PD is the skill that enables a teacher to pass knowledge over to students. Participant 2 said, “Let me confess that I cannot give a clear explanation of PD, but I can google it on my phone and tell you.” P2 was given the opportunity to read the google definition and it was noted. Table 3 represents participants’ responses to interview questions (1 – 6) that are related to RQ1.

Analysis of the data revealed that the participants demonstrated appreciable understanding of the goals of general PD. The majority, or seven of the eight teachers perceived PD as a process intended to sharpen their skills. The responses to the interview questions under RQ1 indicate participants have appreciable knowledge of the construct of professional development. The definitions or perceptions each participant provided was based on their understanding. Although some of the participants’ responses were similar to textbook definitions, others were based on experiences and information from PD that the participants attended. The themes that emerged hence indicated that participants were able to demonstrate understanding of the importance of professional development.

Theme 2: Articulating Understanding of PD Benefits

The theme that emerged from analysis of the data and codes was also based on how teachers perceived the benefits of PD to the teaching profession. When asked what they thought were things that went well and benefited them professionally during PD sessions, the common message was that PD is added knowledge to the field of education. P1 said, “PD is a valuable way to enhance teaching skills and knowledge.” P2 responded that PD helps teachers pass knowledge to the younger ones.” P6 said, “PD improves education quality”, while P8 said, “PD allows teachers to leave the learning curve and follow different trends.” According to P8, PD is a training that can help proprietors know who is serious to teach.

Examination of the quotes from the responses to RQ1 and interview question #4, showed that participants articulated a strong understanding of the benefits of PD. The participants basically agreed on the importance of PD for teachers and how it can impact student learning as a benefit. They articulated the goals of PD by referring to specific strategies they learned from PD’s they attended, such as classroom management, and lesson planning, which have helped them improve their teaching; however, they noted that not all professional development programs are beneficial, especially those that are not participatory and facilitated as delivery of speeches and discourses.

RQ2: What are Liberian secondary teachers' perceptions of the weakness of the PD at USD?

The second research question was intended to obtain teachers’ perceptions of the weakness of the USD PD. The interview questions were therefore indirectly based on

participants' perceptions of the qualities of the PD that were not benefiting them professionally and needed to be fixed. The interview questions asked their perceptions of barriers in applying their new skills, aspects of the PD syllabus or topics that should be removed. They were also asked to comment on the reaction of their students before and after their PD experiences and changes they have observed about the prevailing situation where USD PD was not improving student test scores. The participants narrated instances when PD facilitators did not demonstrate capacity to lead, and a lack of resources which were barriers to their practice as indications of weakness in the PD.

Theme 3: Absence of Research-based Learning Strategies

The following quotes from participants' responses generated the research-based theme: response to Participant 2 stated, "PD workshops were teacher-centered, and we did not participate." Participant 3 reported that facilitators did recognize diversity in learning styles by stating,

I had a problem with the visual aspect of the facilitation. Because as a teacher I know that students do not learn the same way and sometimes adults do too. Some of us can hear and learn, some need to see to learn and some have to touch. In three of the PD workshops I attended, facilitators did not consider those aspects of learning maybe because they thought because we were adult learners.

Participant 5 said, "Some of the presenters did not know where to start and end a session", and Participant 7 said, "The lectures were delivered without visual aids and PowerPoint presentations"; Participant 8 stated, "Facilitators showed minimum capacity on how to develop and evaluate tests."

The statements from the participants indicated that the PD at USD was facilitated using traditional methods and hence required adult learning strategies that research show are effective. The interview questions were designed to collect information on whether participants could differentiate between the importance of PD and how they would benefit by regularly attending. The responses which stated their personal skill improvements showed teachers had an insight into PD benefits while those that referred to general pedagogy development were considered as having insights into PD importance. There was a significant indication that participants could explain the benefits of PD.

All participants reported minimum application of research-based adult learning PD facilitation strategies. For example, adult learning strategies such as self-directed learning, simulation-based learning, use of technology and critical reflection were not utilized. The participants reported that the PD that they attended were facilitated in common classroom styles. In addition to the classroom styles, the process was teacher-centered as participants were not provided opportunities to contribute.

Theme 4: Shortage of Resources

In response to the shortage of resources question, participant 4 shared this experience:

At some of the workshops there was a clear shortage of resources. For example, at one of the workshops I attended, there was no electricity and although the facility had a power generator, no funding was allotted by the district for fuel. At another instance, we had to share instructional materials such as handouts and facilitation

notes. When we asked why there was not sufficient resources the answer was, “That is what we have. Manage it for now.”

All participants reported shortage of resources as a key barrier to conduct PD. The message that resonated was that the USD PD would have been strong enough to produce expected outcomes if resources were available.

Theme 5: Teacher-Centered Facilitation

On the teacher-centered theme, Participant 2 stated, "The workshop was teacher-centered, and we teachers did not have sufficient opportunity to participate." Participant 1 sharing their experience from a PD workshop, noted:

The workshops that I attended were something like abstract that a facilitator will come and then just demonstrate. There was no projector to display information. Those things they taught were things we have been seeing and doing in the classroom with our students. So, we just sat there and listened with respect because most of the facilitators were not even given a chance to answer questions.

All participants reported that the facilitation method at the USD was teacher-centered. In defining teacher-centered as a strategy, they stated that the strategies used to facilitate the PD were similar to those they used to teach their students in the classrooms. At one of the sessions, each facilitator was assigned a topic. There was no technology, and the facilitator did not distribute any handouts but instead stood before the group throughout the one-hour period.

RQ 3: What are Liberian secondary teachers' perceptions of the recommended improvements of the PD at USD?

The goal of RQ3 was to collect recommendations for the mitigation of challenges to narrow gaps in practice that the study identified at the USD. To collect on this, I designed interview questions focused on what went well at the PDs, what did not go well and what could have been done better. Different recommendations were made by each of the participants; however, the common recommendations from which the theme evolved was the need to transform the existing PD from conventional to a non-conventional one so that it is aligned with global standards.

Theme 6: Nonconventional Learning Strategies

Asked what they thought would like to change, the following were some of the recommendations: Participant 1 said, "There should be use of technology; equip our science laboratories with more resources and build more libraries"; Participant 2 recommended that adequate resources such as libraries, teaching materials; conducive learning materials be made available for improvement in the PD; Participant 3 said, "Remove topics on policy implementation and retain social studies, and basic components of math," and Participant 4 said, "Curriculum development is not necessary as a teacher PD topic"; Participant 5 recommended the use of projectors for PDs and provision of visual aids, and Participant 6 recommended that topics on classroom management, lesson planning and testing should be retained and relationship with other schools should be removed; Participant 7 said, "PD should be done by subject areas.

District should provide resources for science refresher to be held frequently” Participant 8 recommended more resources for PD and a need to change traditional ways of PD.

Analysis of the responses show that the recommendations can be placed in two categories: (a) Things that could have been done better and , and (b) Aspects of PD that should be retained and aspects that should be removed. Recommendations in the first category suggest the inclusion of more innovative and nonconventional means of conducting the USD PD. While the participants did not explicitly mention the conceptual framework, their responses related to the need for transformational learning practices to be included in the USD PD. The second category is based on the inclusion of topics in the PD that are relevant to nonconventional PD facilitation and content, and removal of those that are of less priority. All the participants gave responses that indicated that the existing PD should be transformed from conventional to nonconventional framework. The common insight from analysis of the data was that the existing PD content and facilitation processes were conventional and did not meet global standards because they were conducted using traditional methods.

Theme 7: Access to PD Resources

The common recommendation that emerged from the responses to interview questions 9 and 10 was the need for USD to improve access to resources for the PD program. P2 said, “Adequate resources such as libraries and teaching materials should be made available for PD and general pedagogy. Participant 2 also recommended that adequate resources such as libraries, reading rooms and teaching materials should be made available to improve the PD. Participant 3 recommended provision of visual aids

and added, "Make sure PD materials are enough for facilitators and teachers." Participant 4 noted, "District should build libraries and provide resources"; Participant 5 recommended the use of projectors for PDs; Participant 6 stated, "Technology should have been present; Visual aids should have been given all of us", and Participant 8 recommended the building of community libraries as additional access to PD resources.

Over half of the participants recommended that the district should improve access to resources. The issue of a lack of support and resources for PD programs is not unique to the USD. During the 12-year tenure of Liberian President Sirleaf, the sector was consistently challenged with limited resources for pedagogy and teacher training. While the launching of massive PD programs to improve student test scores was laudable, poor access to resources posed challenges to successful implementation.

Summary of the Themes

The purpose of this qualitative study was to explore Liberian secondary teachers' perceptions on the strength, weakness, and recommended improvements of the PD at USD. The data was collected and analyzed by interviewing and examination of the transcripts to identify emerging themes. The seven themes that emerged from the analysis of the interview data transcripts data were (1) Articulation of PD goals, (2) Benefits of teacher PD, (3) Research-based learning strategies, (4) Shortage of resources, (5) Teacher-centered PD facilitation, (6) Nonconventional learning strategies, and (7) Access to resources. Each of the seven themes were derived by identifying codes and placing them in categories that constituted themes.

The first two themes, (1) Articulation of PD goals, and (2) Benefits of PD emerged from RQ1 which focused on identifying the strength of the existing PD. The interview questions collected data on the extent to which teachers understood the goals of PD. I perceived that teachers would be motivated more to attend PD regularly if they understood the reason for attending PD and if they attended regularly, their skills and student tests scores would improve. To investigate this perception, the interview question sought to show to what extent the participants understood the goal of PD. The purpose of the second theme was similar to the first. While to understand the goal of PD would motivate participants and improve their skills, I proposed it was advantageous to know if participants knew the benefits they would gain by attending PD. The third, fourth and fifth themes, (3) Absence of research-based learning strategies, (4) Shortage of resources, (5) Teacher-centered PD facilitation strategies emerged from analysis of responses to the questions on the perceived weakness of the existing PD. I wanted to get insights into challenges which could have caused the PD to fail. Themes six and seven, (6) Nonconventional learning strategies, and (7) Access to resources, were derived from analysis of responses to questions intended to collect data on participants' PD preferences. The questions were also intended to obtain the participants' recommendations on the type of inputs or resources required to transform the USD PD from the existing conventional format to a nonconventional format.

The general analysis of the seven themes showed strong indication that factors which indicate the weakness of the existing PD were more than those that indicate its strength. Three themes that emerged from the analysis of RQ2 on weakness provided data

for this determination. Absence of research-based learning strategies, teacher centered facilitation and quality teacher capacity development workshops resonated throughout the analysis. The shortage of resources as a theme was also identified as a barrier to teachers' post PD experience in the classrooms. Participant 5 said, "Facilitators did not know how to improvise teaching materials." Participant 3 said, "The workshops never started on time and resources were in less supply." Participant 4 noted, "Resources to conduct PD are not sufficient." Participant 6 reported classroom overcrowding, lack of resources including incentives as barriers when he noted, "Overcrowded classrooms, lack of instructional materials and low incentives." Participant 5 made a strong statement about the PD barriers by saying,

Some of those barriers are the text books and some other things. To add to this are the technological materials that we were told to use by some of the facilitators. We do not have flat screens in our classes. We don't have any kind of gadgets in the class for the students to use. We are discussing other countries, but we don't have it on the screen for the students to see and the textbooks are not there. So, it's just from the view of the teacher to the board in a student's copy book. So, the time to move on to the next topic is another problem.

A scrutiny of the responses revealed that PD facilitators did not utilize strategies that are widely used in conducting adult learning. Those strategies whose efficacy are based on research findings, include self-directed learning, simulation-based learning, and critical reflection. They are also participatory learning strategies that create transformation in adults. Considering the transformational learning theory, which is the conceptual

framework of this study, the need to include research-based adult learning strategies could be a key step in transforming the existing the existing PD to a nonconventional one.

Accounting for Salient Data

The three salient data that surfaced in the findings of the study were based on resources, technology for PD facilitation, and classroom management. Inductive codes that informed them were the following statements: Seven of the participants reported shortage of resources to conduct PD and to teach in the classrooms. “Materials for hands-on activities are not enough so we have to share when we attend PD.” Five of the participants named absence of technology as a major impediment to the PD and to their classroom practices. The utilization of technology for PD in the classroom surfaced in most of the interviews. “If the district could provide PD facilitators with projectors for them to do PowerPoint presentation, the PD would be better.”

The statements constituted salient data because they stood out and resonated throughout the data. In addition, the data revealed a significant learning curve about the situation in the USD PD. The interview questions did not directly focus on classroom management issues because PD usually entails improving teachers’ practices. The emergence of limited resources and classroom management in the data was due to participants’ reflection of the challenges in the classroom when they left the PD workshops. Limited resources and classroom management according to many of them were the key determinant of teaching and learning; these they held in foresight and propounded throughout the study.

Evidence of Quality

To demonstrate evidence of quality, I observed core rules of data trustworthiness. Thomas (2017) identified four criteria for qualitative data trustworthiness as credibility, transferability, dependability, and confirmability. For credibility, I conducted two member checks. The recorded interviews were transcribed and emailed participants to read for accuracy. After reading, participants were to send their comments within one week. However, after five days I received only 4 comments.

To avoid delays in completing the study, and considering the challenges in Liberia I flew from the United States to Liberia and met face-to-face with each of the eight participants. During each of the meetings, the participants read the transcripts to examine them for accuracy. Following the face-to-face meetings, we edited the transcripts to match the voice recordings and what each participant intended to place on record. All the participants confirmed that the edited transcripts were accurate

Dealing with Discrepant Cases

The utilization of deductive and inductive codes for this study generated a discrepant case. Discrepant cases or outliers occur in instances where some data or responses do not match the rest of the data or explanation (Trainor & Bundon, 2021). An outlier or discrepant data that surfaced during the interviews was the gap in USD's monitoring and evaluation (M&E) activities. One participant remarked, "District officers need to go around and check on the teachers and attend the PD workshops to see if they are running well." Another participant noted, "Sometimes we do not see the district officer at any PD workshop to motivate us or to create some caution for those who do not

respect PD usually boycott sessions.” The focus of the study was to obtain insights into the strengths and weakness of the PD but there were no questions on monitoring and evaluation (M & E); however, statements on M & E emerged in the data. The issue of the discrepant case will be included in the project development in Section 3 of the study and recommended for future research studies.

Summary of Outcomes

During the interviews, the eight participants shared their experiences from PD sessions they attended. They also shared their understanding of what makes PD attendance productive and relevant to their respective professional needs. They also discussed the challenges they faced in applying what they learned in the classroom, such as lack of instructional materials, limited resource reservoir, lack of technology, and limited time. Overall, the discussions highlighted the importance of professional development programs that provide teachers with practical skills and resources to improve their teaching.

The participants also discussed relationships between professional development and student test scores. The experienced teachers (at least 5 years of teaching experience) believed that attending professional development workshops helped them acquire new skills that they could apply in their classrooms, leading to better student performance. The novice teachers (with at most 5 years of teaching) did not give definite explanations of the relationship between PD and student test scores but rather focused on their personal skills application. Six of the participants recommended that the use of technology should be included in professional development workshops to improve the

strength of the USD PD. The participants were asked to present three recommendations to improve professional development in their school district. The recommendations from both old and new teachers were almost similar and based on the need for more instructional materials, the inclusion of technology, establishment of resource centers such as community libraries and science laboratories to enhance teachers' research skills and student learning in the district.

In conclusion, the responses gave indications that the PD was strong in terms of the understanding of its purpose. The responses indicated that USD PD is weak by absence of adequate transformational learning and adult learning facilitation strategies and absence of technology in PD facilitation. The salient data was the shortage of resources and instructional materials to apply the acquired PD skills.

Description of Project Deliverable as Outcome of the Results

The purpose of this qualitative study was to explore Liberian secondary teachers' perceptions on the strength, weakness, and recommended improvements of the PD at USD. The theoretical framework that guided the study was Mezirow's transformational learning theory (Mezirow, 2018). The results from the data collected to accomplish this task presented valuable information that informs the improvement of the existing USD PD. The outcomes of the data analysis indicate extremely weak points in the USD PD including deficient application of transformational learning to train adult teachers, barriers that impede teachers from applying the minimum skills obtained from attending PD and the shortage of technology and resources to improve the system, therefore, the

outcomes of this study would serve as major deliverable for a project to develop a PD curriculum or program for the USD PD.

Section 2 of this project study described the research design used to explore the local PD problem at the urban school district. I justified my choice of research design and explained why other likely choices would not produce the same outcomes. I described the criteria for selecting the participants and gave justifications for the number of participants. I described the strategy that would be used to access the research site and how working relationships would be established with the participants. I described how the participants would be protected from harm, how the data collection and analysis would be done, and the instruments that would be used to collect the data. I explained how typology and thematic coding would be used to deal with discrepant data when they surface in the project study data. In the results of the analysis, I reviewed the process by which the data were generated and recorded. In the findings from the research problem and questions I accounted for salient data and explained how I dealt with discrepant cases that evolved during the analysis. I discussed the outcomes and showed how they would serve as deliverable of the project in Section 3.

Section 3: The Project

The purpose of this qualitative study was to explore Liberian secondary teachers' perceptions on the strength, weakness, and recommended improvements of the PD at USD. A policy recommendation position paper was chosen as the deliverable based on the data collected from semistructured interviews with 8 teachers. The project is entitled, "Pathway to Reform and Strengthen the USD PD." (See Appendix A). The goals of the project are to provide recommendations on a pathway to reform the existing PD, and to suggest contents and strategies to train teachers and improve their practices. When approved, adopted, and applied to PD facilitation, the project may help to improve student test scores. This section includes a rationale of why the project genre was chosen and how the problem is addressed by the project. A literature review based on the findings and the relationship to the genre of the project is included. This section also includes a project description, an evaluation plan, and implications of the project.

A hybrid qualitative thematic data analysis method consisting of inductive and deductive codes was applied to generate findings from the data. Predefined codes were derived from the literature review, and the conceptual framework of the study, and complemented by inductive codes that emerged during the data transcript analysis. Analysis of the findings show significant gaps in the facilitation, gaps in the support base, and attempts made to narrow gaps. Seven themes that emerged from the analysis of the interview data transcripts data are (a) Articulation of PD goals, (b) Benefits of teacher PD, (c) Research-based learning strategies, (d) Shortage of resources, (e) Teacher-centered PD facilitation, (f) Nonconventional learning strategies, and (g) Access to

resources. These themes were used to inform the project detailed in this section. An analysis of the seven themes showed that the existing PD at USD embodies strength and weakness in various sections. The findings also show that the teacher participants perceived there are gaps in the USD PD. To narrow the gap requires district approved policies to reform and improve the quality of the PD and improve student tests scores. Consequently, I developed this policy recommendation proposal as a pathway to reform the existing USD PD to one that follows research-based adult learning contents and strategies, moving it from conventional to non-conventional learning approaches.

Rationale

Having considered other project genres, I chose a policy recommendation position paper as the best way to present the study's findings, and the related recommendations based on the teachers' perceptions of the PD strength and weakness. First, I considered evaluation genres models including program evaluation review template (PERT), and critical path method (PM) to see if they could be used as the project for this study. I found that those genres were not appropriate for the project because they use models and frameworks that refer to specific aspects or dimensions that an evaluation process aims to examine (see Ba'Its et al., 2020; Yuliarty, 2021). My research study did not use any specific evaluation model but was based on perceptions of teachers to gain insight of how they felt about the strengths and weakness of the USD PD. Second, I examined the curriculum plan genre which describes materials, units and lessons in detail including activities, objectives, assessment as well as the need for it be to outcomes based (Japee & Oza, 2021). As suggested by Zhao and Fan (2023), experience shows that the separation

of curriculum and instruction can seriously block the process of curriculum reform. They also noted that there is excellent value to resist one-size-fits-all thinking and reassess the issue of curriculum and instruction integration from a practical perspective.

Considering that my study was a result of gaps between instruction and student performance, I concluded that curriculum plan genre was not appropriate for the project because the project study goal was not the development of a curriculum plan. The purpose of my research was not to conduct professional development for teachers; hence, the professional development and training genre was not chosen. The problem explored through the study was that secondary school teachers were attending district mandated PD to hone their teaching skills, but student test scores were not improving. Insights from the teachers' perceptions showed the PD lacked adequate resources for facilitators and teachers' classroom activities, and the learning activities did not contain research-based adult learning strategies.

To address this problem, I chose a position paper because it would be the best way to present the study's findings, and the related recommendations based on the teachers' perceptions of the strength and weakness of the USD PD. As suggested by Bala et al. (2018), a position paper should elucidate the knowledge gap, followed by an evidence-based review of options, leading to an endorsed position. A position paper should focus on topics relevant to practice, by making suggestions in a way that people who are experts can access. It should represent more than the opinion or consensus of the authors but should present current opinions and practices supported by research (Bigi, 2020). The purpose of this position paper is to provide the USD with information and

suggestions on ways to positively affect the quality of the current PD. The position paper will present the study's findings, an overview of current literature, troubleshooting mechanisms, recommendations, resources, existing supports, potential solutions to barriers, and a proposed timeline for implementation.

Review of the Literature

Research has produced extensive discourse on the importance of selecting appropriate pathways for educational reforms. A major component of educational reform that has served as a reform pathway in many education systems of the world is professional development. This literature review discusses the position of professional development as a pathway to educational reform. In the first segment, I discuss general perspectives of educational reform in developed and developing countries including China and Africa. I also include some genres of PD reform pathways, conventional and nonconventional PD reforms, the position of teachers in educational reforms, and teacher education as a desirable reform pathway. In the second segment, I discuss research-based best practices for online professional development for adult learners. In the final segment, I discuss the relationship of PD reform pathways to Mezirow's TL theory.

The databases I used for this literature review were Google Scholar, ERIC, and EBSCO using peer-reviewed journals that relate to educational reform and professional development reform pathways. The set of search terms used were taken from literature relative to the genre of my project and published within the last 5 years. The following were search terms and phrases used for this literature review: *educational reform*, *reform pathways*, *education globalization*, *online professional development*, *preservice*

and in-service professional development reform, professional development protocols, and globalized professional development and technology.

Perspectives Of Educational Reform

Educational reform is a process that school leaders in many parts of the world launch to narrow gaps in teaching and learning. This has generated huge volumes of literature on related successes and challenges faced by developed and undeveloped country school systems. In those situations, successes and failures have been based on the perspectives of school leaders. As noted by Cohen et al. (2018), the aim of educational reform is to improve the quality of teaching and learning in a country. It involves planning changes to the way schools function with a focus on teaching methods and administrative processes. Common goals for education reform initiatives are to change educational theory and practice, to close achievement gaps, to improve student outcomes, and to improve quality and support advocacy on equity in student outcomes. In identifying school privatization in the educational system of Chile as a type of reform, Carrasco et al. (2029) looked at how those who own and work in schools view educational reform. While Carrasco et al. and Cohen et al. propounded that the common goal of educational reform is to improve the quality of teaching and learning in a country, there are instances where the choice of reform pathways in developed and developing country educational systems faced challenges and did not meet expectations. In those instances, the process was policies were either revised or replaced generating the message that educational reforms require thorough planning and should be based on specific needs.

U.S. Educational Reform Policy Situations

Over the last 6 decades of the 21st century, from 1965 to 2015 there has been a considerable number of educational reforms in the United States. Following the ratification of the Elementary and Secondary Education Act (ESEA) by U.S. President Johnson in 1965, a considerable number of educational reform policies emerged in the U.S. educational system. According to Terry (2022), it was ESEA and the Gardner education reform report that helped to shape educational policy and funding in the US. According to Lichter (2017), when the U.S. Government realized U.S. education was substandard to its Russian competitor, it launched a nationwide educational reform in 1983. Consequently, President Reagan's national Commission on Excellence in Education which was set up to evaluate the whole education system returned with a report that a reform of U.S. education was imperative because its low quality had placed the nation at risk. Since the "A Nation at Risk: An Imperative for Reform" report, several reform initiatives and policies including the No Child Left Behind (NCLB) Every Student Succeeds act (ESSA), the Common Core standards (CCS), and the Race to the Top (RTTT), have emerged to improve U.S. education. A nationwide educational reform was also launched in compliance to a call by the Obama administration in 2010 for schools in prevalent poverty and urban communities to be targeted for rapid advancement to improve low standardized test scores. As noted by Nolan (2018) President Obama's call for reforms resulted into a vast array of reform mandates and intense pressure to put mandates into practice without delay.

To reinforce his educational reform mandates, President Obama signed a sizable number of educational reform policies into law, over his 8-year tenure. The ESSA was ratified to revise President Bush's NCLB. This was followed by the CCS, and the RTTT educational reform policies. Saultz et al. (2021) noted that although the ESSA with the RTTT and CCS were designed to close the gaps in the NCLB, it failed to fundamentally alter how the federal government interacts with schools. According to Chu et al., (2022), most of the state plans in compliance to ESSA did not include a clear definition of what they meant by "equity" furthermore, the accountability systems used to evaluate the impact of equity policies in the plans are outcome-oriented using student standardized test performance as the key indicator (Anlimachie, 2019). Capel and Schneller (2022) also noted that despite the CCS in math being implemented across the United States by teachers since 2010, findings showed that the one set of standards for every student strategy did not make every student successful; hence, it failed. The result of this situation rendered President Obama's legacy to be considered transitional and controversial (Capel & Schneller, 2022). Based on the policy situations, Chu et al. (2022) concluded that despite numerous education reform efforts, disparities between more privileged students and students from marginalized and minoritized groups still persist in U.S. education.

A similar successful educational reform was launched in China that improved higher education and placed its educational system coordinated with other Western countries. Xiong et al. (2022), noted, "Since the 1978 reform and opening up, China's

higher education has taken on a new look and learned from its North American and Western European counterparts” (p.3).

Conversely, educational reforms launched in the developing country of Liberia have faced serious challenges. In 2011, the Liberian Government launched an educational reform by revising existing education laws (Liberia Ministry of Foreign Affairs, 2011). Other reform initiatives include an Internet Communications Technology (ICT) pedagogy project and a mandatory professional development for all teachers. However, it did not produce the expected outcomes. After 12 years of launching the reforms, statistics continue to show a decline in Liberian students’ test scores thus indicating the reforms were facing challenges.

As noted by Cohen, et al. (2018), reforms always seek to succeed. Successful system-wide reforms were those that addressed teacher perceptions of their individual problems in prevailing circumstances (Cohen & Mehta, 2017). While the claim by the researchers that reforms always seek to succeed is germane, a key factor to that success is the selection of the appropriate reform pathway. Like all reform policies, Liberia’s educational reforms were designed for success; however, the genre of reform pathway selected might be a factor to its deficiency.

Genres of PD Reform Pathways

A widely used pathway adopted for educational reformers is to move from conventional learning to nonconventional learning or blended learning. Conventional learning approaches are traditional or commonly used education strategies used for a significant period and often involve face-to-face interactions, structured curriculum, and a

focus on teacher-led instruction (Khan, 2022; Peng et al., 2023). This approach is widely used in most underdeveloped countries and Africa because of the lack of electric power and other infrastructure to accommodate ICT. Conventional learning approaches have been the norm for many years; nevertheless, there has been a growing call for incorporating innovative and technology-driven methods in education to boost learning experiences and adapt to the evolving needs of students in present day classrooms. Nonconventional learning approaches are present-day strategies that are alternative methods to traditional or conventional educational models. These approaches emphasize creativity, student-centered learning, and innovative techniques.

Blended learning has gradually been taking center stage in the 21st century. Accelerating its adoption during the COVID-19 pandemic situation, blended learning was introduced through means which are combination of conventional and non-conventional learning approaches and became a popular pathway for educational reform. As suggested by Peng et al. (2023), for reform to be successful, instructors in blended learning settings should effectively integrate technology and appropriately apply pedagogies, making the design sustainable and learner-friendly to exploit students' learning potential. Khan (2022) suggested that blended learning is educators' use of classical or conventional approach of classroom teaching met with the nonconventional or contemporary teaching and learning pedagogy. It is useful for the same students studying the same content in the same course with the help of numerous ICT tools. Research shows that academic reflexivity, social interaction, and agency, in dynamic combination, are important to understand and explain navigation of blended learning as a feature of

pedagogy (Truss & Anderson, 2023). A consensus rating among contemporary researchers and educational reformers is that the blended learning model had more positive influences on preservice teachers' academic achievement and long-term learning compared to the traditional teaching methods implemented in a control group experiment (Şentürk, 2021).

Position of Teachers in Educational Reform

Teachers are responsible for producing quality education through high student performance; however, research shows that policies and support required to build the capacity of teachers usually receive less support. As noted by Cochran-Smith et al. (2020), the people who prepare teachers are often openly or covertly responsible for teacher quality and are frequently blamed when students do not meet national or international expectations. The researchers noted that despite lofty expectations, historically, little attention has been paid to the education of teacher educators and to local and larger policies that would support the development of teacher educators who are prepared to meet the complex demands for trained teachers for 21st century pedagogy.

There is a tendency for certain voices to be deliberately sidelined in policy climates where various actors claim to have the solutions for the enduring challenges of teacher education, and policy deliberations. Aydarova and Berliner (2018) noted that the contest between teacher education policy and actual practice is an age-old issue that has produced significant discourse on education reform with repositioning serving as an important first step. According to Mayer (2021), teacher education is now a politically constructed and ideological policy problem, and the associated discourses of evidence are

contributing to disconnections between teacher education research and policy. In a study to understand how teachers are positioned in policy reforms, Ellison et al. (2018) sought to understand what practicing teachers would say if they were given a voice in political debates, and what macrolevel policy problems would they identify as being important objects of reforms to enact educational policies. Findings from the study showed that within policy discourses, teachers are positioned as objects of reform who enact policies under rational systems of observation and accountability and are, therefore, situated as de-professionalized actors lacking expert knowledge.

Teacher Education as a Desirable Reform Pathway

As noted by El-Bilawi and Nasser (2017), teacher PD quality is widely known as one of the factors that contribute to failures and successes of educational systems. Consequently, research shows that education reform interventions designed to improve educational systems target PD as the desirable pathway. In a study conducted by El-Bilawi and Nasser (2017) as part of a national reform initiative, the government of Egypt selected professional development as the desirable pathway for its educational reform. Teachers in the reform initiative expressed dissatisfaction with the lack of support in the education reform initiatives. The inclusion of teachers as participants in the national educational reform was an opportunity to obtain real life experiences that revealed the strength and areas of the educational system to address. In addition, the voice experiences shared by teachers presented a pathway that policy makers could take to reform the education system in Egypt. The approach of my project study is like the Egypt reform as it uses the voices of teacher participants to inform its reform pathway decisions.

Research showed decisions on the selection of educational reform pathway policies are essential inputs for success. Feng et al. (2023) noted that desirable pathways contribute to the development of differentiated instructions and offer valuable insights into sustainable professional growth for beginning teachers. As noted by Godfrey and Olson (2019), three stages in the cultivation of reform pathways are (a) emerging, (b) developing and, (c) deepening. Each of these stages are critical to the achievement of agency for the development of teacher professionalism, teacher experiences including student learning.

In many countries including the United States of America, Ghana, Liberia, and some French West African countries including Niger, teacher education is being increasingly framed as a policy problem that requires national solutions and large-scale reforms. In practice, U.S. educational reform practices were moved by political actors and exacerbated anti-Blackness through inequitably mandated standardized testing, distributed funding, and policed schooling (Debray et al., 2023; Robinson & Bell, 2023; Skinner et al., 2022). In the West African nation of Ghana, educational reform focused on structure and changes in Ghana's teacher development policies and practices follow the adoption of a new program which took effect in 2018. Suggesting a line between political policy and educational success, Buabeng et al. (2020) called on policy makers to address research-based contextual issues as a need for continuity in teacher education policies in Ghana considering the numerous politically related reforms.

The public education system in French West Africa was politically motivated instead of focusing on learning goals. According to Chafer (2018), policy makers and

politicians designed the system for several issues such as the consolidation of French influence and training loyal intermediaries to staff the lower levels of colonial administration, to promote manual work and raise productivity; and to educate Africans without uprooting them from their society. Those situations supported assertions that political groups and policy makers drive educational policies. According to Datnow (2020), teachers' professional lives and their role in change efforts have always been central to Educational Change. Teachers' motivation for and commitment to reform, their belief systems, professionalism, networks, and their professional development, among other topics are dynamics of educational reforms (Datnow, 2020). The discourse over educational reform policy and the influence of policy makers confirm that teachers are unequivocally central to educational change because their professional lives and role in change efforts have always been key to political leaders who are drivers of reform policies. While district leaders would be initiating means to reform education, implementation and availability of resources depend on policies which are usually approved by governments. In some developed countries like the US and United Kingdom, although school districts are attached to departments of education (DOE), they have autonomy over significant aspects of the operations of their budgets and administrative policies.

In the case of Liberia, a single ministry of education (MOE) manages the educational operations of the whole country. Although the MOE is the sole education manager, its administrative and fiscal policies are approved by a legislative education committee through political filibustering. As a tradition, the budget of the MOE is

embedded in the annual national budget and disbursed based on the policies. By law, the Liberian education reform policy should be the pathway for its reform initiatives; unfortunately, other political and legislative maneuvers and policies are more powerful and drives Liberian educational reform.

Online Professional Development as Pathway for Adult Learners

According to Powell and Bodur (2019), online PD offers opportunities for growth to teachers who may not be able to participate otherwise due to constraints. Online PD made a significant impact on adult learning during COVID-19 (Nambiar, 2020). These constraints include, but are not limited to time, and travel distance. Despite those constraints, the Covid-19 pandemic brought out a drastic reform to educational systems across the world in developed and developing countries (Bajaj et al., 2021; Verma & Priyamvada, 2020). First, it created an unprecedented situation in our world and forced educators, administrators, policymakers, students, and parents to face exceedingly tough times in terms of teaching and learning. Second, educators were compelled to enhance their skills to start using technology for distance and remote learning. Despite the gains, the sudden shift to online learning generated an array of novel situations.

The COVID-19 situation generated hybrid learning (face-to-face and online learning) in some cases, and total replacement of face-to-face learning with online learning in others. During the Covid-19 pandemic situation in India, conduction of online classes at grade schools, college and university levels was declared mandatory by educational boards in India (Bajaj et al., 2021). In addition, *COVID-19 situation created a need for students and teachers' attitudes towards shifting to an entirely online learning*

environment to be assessed. Afroz et al. (2021) suggested that cost and time-effectiveness, safety, convenience, and improved participation were the most frequently cited positive aspects of the online learning experience among Bangladeshi Government Colleges. They also noted that distraction and reduced focus, problems with technology and the internet, lack of ICT knowledge, poor network infrastructure, and insufficient support from instructors and colleagues were the most recurrent negative aspects.

COVID-19 created pressure on education leaders to find alternatives to face-to-face education. Consequently, teachers and students have used online teaching and learning on an unparalleled scale (Mushtaque et al., 2021). A diverse faculty based on characteristics including age, sex and years at a Philippines college expressively differed whether they were in favor of online education. Some of the faculty suggested online education would result in more academic dishonesty, would be impersonal and would lack feeling compared to attending face-to-face classes, and would be difficult to manage in terms of technology (Oducado, 2020). According to Naah (2020), the arrival of COVID – 19 saw an increasing popularity of information and communication technology among pre-service in-service teachers. As noted by (Dassanayaka et al., 2022), the Covid-19 pandemic, together with technological advancements, has triggered exceptional commotion in education systems, notably in universities, disrupting their traditional teaching and learning processes. In educational systems where face-to-face teaching was replaced with online methods, several teachers raised concerns over the change. A study by Verma and Priyamvada (2020) revealed that although some school teachers found

significant benefits of teaching through online mode, other teachers did not feel confident and were more comfortable teaching through traditional methods.

Over the last four years from 2019 to 2023, COVID-19 has stimulated online professional development and student learning in many different ways. There were distinct effects of COVID-19 in developed and developing country school systems such as the US and Liberia. In the United States, some school districts like the School District of Philadelphia (SDP) and the Southeast Delco School District (SEDELCO), virtual classes or online education were conducted for secondary school students. While COVID-19 had a negative impact on human life, it had some indirect benefits to teachers and students. Teachers' virtual facilitation skills were improved and students' time on computer increased and enhanced confidence in conducting internet-based research.

In Liberia, Even though online education was not applied at all schools at the secondary level during the COVID-19 period, high profile private schools that possessed the necessary infrastructure offered online learning and online professional development for teachers. Less profile private schools, and all public schools were closed down without offering students alternative pedagogical means. The deficient online PD situation in Liberia presented school leaders opportunities to reflect on the need to reform teacher PD and student learning to contain non-conventional teaching and learning strategies.

Relationship of PD Pathways to the Conceptual Framework

The purpose of this qualitative study was to explore Liberian secondary teachers' perceptions on the strength, weakness, and recommended improvements of the PD at

USD. The overarching goal of this section is to develop a position paper containing recommendations and usable information that leaders of the urban school district can apply to the reform of the current deficient professional development program which is not yielding expected results. Jack Mezirow's transformational learning theory (TLT) is the conceptual framework of this study. It is a learning theory centered on the idea that adults can undergo transformative learning experiences that lead to changes in their beliefs, perspectives, and actions Kurnia (2021).

According to Kurnia (2021), transformational learning theory is centered on the idea that adults can undergo transformative learning experiences that lead to changes in their beliefs, perspectives, and actions. Kurnia (2021) further noted that TLT is the process where learners are moved toward a frame of reference with more inclusive self-reflection and more integration of experience. As noted by Schnepfleitner and Ferreira (2021), core elements of transformative learning are critical reflection, dialogue, and individual experience. Transformational learning is the process of effecting change in a frame of reference, using structures of assumption to understand our experiences.

As an adult learning theory, TLT subscribes to andragogy or adult learning strategies including self-directed learning (SDL), Critical reflection (CR and simulation-based learning (SML). In the literature review, the sources all the sources accessed showed strong relationships to Mezirow's TLT and contained features of pathway to the reform of the USD PD. While those strategies are useful for adult learning in Liberia, efforts to transform how teachers perceive their capacity development or perspective transformation are key to the improvement of the USD teachers in Liberia.

Mezirow's Perspective Transformation Construct

Mezirow (2018) presented perspective transformation as a more practical construct that more clearly conveys TLT as a habit change or social behavior change apparatus. Lozada and Johnson (2019) noted that perspective transformation is a critical understanding process that we notice and understand our assumptions, and how and why we limit our feeling methods. To change these habits, improving and differentiating them enable integration in perspectives. In presenting perspective transformation as a form of adult learning, Mezirow (2018) stated:

Perspective transformation is a cardinal dimension of adult development and learning that most uniquely pertains to becoming aware that one is caught in one's own history and is reliving it. This leads to a process of perspective transformation involving a structural change in the way we see ourselves and our relationships. If the culture permits, we move toward perspectives which are more inclusive, discriminating, and integrative of experience. We move away from uncritical, organic relationships toward contractual relationships with others, institutions, and society. Perspective transformation reformulates the criteria for valuing and for acting. Behavior change is often a function of such transformation. In this emerging transformation theory, adult education finds its own inherent goals and functions.

Close alignment and relationship exist between this project study and TLT as indicated by its perspectives transformation construct. While I sought to help USD leaders directly acquire an understanding of how teachers felt about the existing district

PD, the indirect goal was to use the information to help develop a system to transform perspectives of teacher participants that may be impeding their practices. This professional thinking provided the platform for the choice of a policy recommendation project as a PD reform pathway and deliverable of this study. When the reformed PD is approved and utilized, it could transform the diverse perspectives of USD teachers.

Universal Design for Learning as Reform Pathway

In present-day classrooms, a learning approach that is becoming widespread is the universal design for learning (UDL). Researchers concur that UDL is a teaching approach applied to accommodate the needs and abilities of all learners and eliminates unnecessary barriers in the learning process (Almumen, 2020; Dewi & Dalimunthe, 2019; Evmenova, 2018). UDL was first introduced in 1984 by Dr. David Rose and Dr. Anne Meyer, two researchers from the Harvard Graduate School of Education. It is a research-based framework intended to optimize student learning by including student choice of content, process, and product in design with three main principles: engagement, representation, and action and expression. While UDL is not an adult learning approach, teachers are required to obtain orientation during PD sessions to deliver pedagogy to their diverse students (Kennette & Wilson, 2019). Providing training on the principles of UDL can orientate teachers in ensuring learning takes place when they teach (Dewi & Dalimunthe, 2019). UDL offers considerable potential to achieve the inclusion of diverse students in the classroom (Fovet, 2020). Research indicates that UDL is effective in engaging all students, including those with disabilities. Although teachers may have basic knowledge of UDL, they need more training and practice to successfully address the needs of all

students, including students living with disabilities (Almumen, 2020). Instructors who invested in accordance with their beliefs that UDL could improve student engagement, enabling them to teach more content, and developed important professional relationships with other instructors who also attended UDL orientation workshops (Xie & Rice, 2021).

Learning Approach Situations in Liberia

The general approach for pedagogy in Liberia is conventional learning. Although research literature on the effectiveness of the conventional approach in Liberia is presently not available, reports from the annual school census from Liberia's Ministry of Education indicate conventional learning is not meeting expectations of the education system. Over the past eight years from Y2013 to Y2021, student test scores have been consistently low. Three conventional teacher professional development approaches are and have been applied by the educational system of Liberia are (a) preservice, (b) in-service, and (c) in-school PD.

The preservice programs are contained at teacher training institutes and target individuals who propose to teach. The preservice teacher trainees are placed at the three state-owned teacher training institutes and trained for 10 months. The new teachers are awarded C-Certificates for the primary grade level, and B-Certificate for the junior high-level. In-service PD targets individuals who are already teaching in the classrooms but do not possess teaching certificates. Due to shortage of resources the programs lack adequate elements of non-conventional learning such as online courses, use of information communication technology (ICT), service learning, and collaborative learning. Despite several interventions including curricular reform, alternative education policies,

accelerated teacher preservice and in-service teacher education programs, student test scores did not improve.

A general perception among education stakeholders is that high student test scores is a result of quality teaching while quality teaching depends on the extent to which teachers are prepared and equipped. The context of the literature accessed in this study supports such a perception. As Mezirow (2018)'s perspective transformation with Malcolm Knowles (1970) andragogy theory propounds, for the teachers of USD to be prepared and equipped, the professional development they attend must utilize appropriate adult learning strategies that would transform perceptions and practices to create social changes in the school district.

Project Description

This study addressed a problem at an urban school district (USD) in Liberia where districtwide teacher professional development launched to improve student tests scores did not meet expectation. The perceptions of eight secondary school teachers were analyzed and insights on the weakness and strength of the PD obtained. The project resulting from this research is a policy recommendation proposal and a sample PD format entitled "Pathways to Reform the USD PD." This proposal contains a roadmap with steps that USD leaders can take to reform the present PD so that student test scores can improve (see Appendix A). The elements of the policy recommendation proposal project are 1) Suggested Policy Statement, 2) Policy Goals, 3) Policy Components, 4) PD Program Details, 5) Expected Outcomes, 6) Roles of Stakeholders, 7) Implementation

Plan and Timeline, Evaluation Plan, and 8) Summary of research that generated the project.

Needed Resources

Existing support: The existing support is the districtwide mandate that teachers at all grade levels are required to attend two school-based PD's each academic year. This existing support will ensure teachers attend the reformed PD, when modified in this proposal and adopted by the district leaders. The availability of spaces within the USD to conduct workshops is another existing support that would enhance the implementation of the proposal. The district education office (DEO) has training rooms that are used for PD sessions and meetings. The two high schools within the district have auditoriums that are available at no cost.

Potential Barriers: There are three key barriers that could impede the implementation of the project. The first barrier is the gap in capacity among PD facilitators. Findings from the study showed that facilitators do not possess adequate capacity to apply research-based adult learning strategies including SDL, SBL, and CR which are components of the transformational learning theory (TLT) conceptual framework that grounds this study. Additionally, facilitators showed a lack of capacity to train teachers how to utilize UDL strategies which is a modern research-based pedagogical approach. The second potential barrier is the low facilitators retention rate. The district presently has funding to pay PD facilitators transportation allowance, but not salaries. This has caused some facilitators to show reluctance to continue while others have left the district for better opportunities. The third potential barrier is limited access

to technology. Limited access to internet communication technology (ICT) and electric power supply is a potential barrier to reforming the PD from conventional to non-conventional learning approach. Electric power supply is not constant in Liberia due to the infrastructural destruction caused by the 14-year civil war. The fourth barrier is the current situation where PD policies do not delegate specific roles and responsibilities to USD leaders and do not specify the criteria for stakeholders and facilitators. The MOE is presently the crucial point of policy leadership and implementation. This situation resulted in gaps in the operation of USD PD programs and contributed to the deficient student academic performance.

Potential Solutions to Barriers: To address the potential barriers situation, USD could take several steps to ensure the project is successfully implemented. The issue of stakeholders in the PD could be addressed by a policy statement that contains criteria that define roles and responsibilities of relevant stakeholders. The implementation of the proposal could be divided into steps, activities with achievable goals. USD leaders should develop a budget to pay salaries to PD to improve the retention rate. Power generators, presentation projectors, and other ICT and instructional materials should be procured to improve access to technology.

Proposal for Implementation

The platform upon which the PD programs will be implemented is the policy position statement. The policy statement will be composed of specific language that articulates the policy. It will be consistent with the language used by the MOE and the existing USD PD. It will strengthen the existing district policies regarding staff

development and professional development programs. The policy statement will recommend additional inputs required to reform the existing PD from conventional learning practices to non-conventional learning practices. The statement will recommend how the district can proceed with the reform process.

Policy Proposal Project

The policy proposal project consists of two segments and four tiers or modules to be implemented over the two academic years. Each segment will be implemented within a semester and will contain three levels or tiers organized as PD workshops or activities. The PD activities will be conducted at the beginning, middle and end of each of the two academic years. All teachers will be required to complete each tier in a prerequisite arrangement or in stages. The contents of the various PD tiers will be divided into four modules. Some teachers would be required to complete more than the minimum requirements depending on their experiences and academic levels. All topics will be integrated with orientation on how to apply UDL, pedagogical knowledge, pedagogical content knowledge as learning approaches and strategies to move from conventional teaching approaches to non-conventional approaches in classrooms. The two segments could be formatted and combined as a single training manual, a single toolkit, a set of binders or an electronic manual depending on the preference of the district. The focus will be on orientation to transformational learning.

All contents of the tiers and modules will be based on findings from the study and focused on promoting social change within the district. The training will create social change by shifting teachers' perceptions of the PD, improving the efficacy of the PD, and

improving student test scores. The following sections describe the ways to implement the “Pathways to Reform the USD PD” project that was generated from this study:

- **Problem Statement:** This section articulates the problem of the existing deficient USD PD that is not meeting expectations. It will contain guiding questions based on the findings of the study.
- **Feasibility:** This section will describe the existing support, and the potential barriers that could hamper or impede implementation.
- **Resources:** Based on the existing support and potential barrier, this section will propose the resources required to address the lacks in the existing resources. It will serve as the mitigation of the challenges or removal of the barriers.
- **Objectives and Outputs:** The objectives are the desired benefits such as intents to improve teachers skills and expected increase in student test scores; Outputs will be the deliverables indicated by increase in the rate of teachers’ completion of PD tiers, the rate of facilitators retention, facilitators’ demonstrated application of UDL, and orientation to transformational learning approaches.
- **Project Details:** This section will detail the overall project. The structure of the PD program, the project activities, expected outcomes, role of stakeholders, the implementing strategies, the implementation steps, and method of evaluation will be clearly explained.
- **Timeline:** An implementation timeline will be developed to indicate how long and at what stage each activity will be conducted, at what point should outputs and outcomes be reported, and how long the program will run.

- Evaluation: The concluding section will explain how the project will be monitored and assessed. Two outcomes evaluation frameworks, flexible evaluation, and detailed evaluation will be developed that should be used alternatively depending on the preference of USD.
- Expected outcomes: This is what the proposal hopes to achieve at the end of each project year. This will be measured by the overall results of the activities and actions taken to reform the PD. This will be measured by indicators to indicate the strength or weakness of the USD PD, improvement in teachers and facilitators' capacity, and improvement in student test scores over each academic year.
- Roles and responsibilities: This section provides a description of the delegation of roles of the researcher and each group of stakeholders that are expected to participate in the implementation of the policy recommendation and the reform.

Project Evaluation Plan

This section of the policy proposal details how the policy's procedures could be evaluated each year. The two genres of evaluation proposed to determine if the policy proposal is meeting expectation are formative evaluation and outcomes-based evaluation. The justification for selecting formative evaluation and outcomes-based evaluation is due to the structure of the policy proposal which contains different segments, and components. The formative evaluation portion will be used to determine short-term incremental outputs of the respective PD components. It will inform district leaders on rates of retention and completion to enable district them and facilitators to make timely interventions. Outcomes-based evaluation is a systemic way to determine if a program

has achieved its overall goals (Kumar, R., & Kumar, K., 2022; Shefeeque, 2020). It helps institutions articulate and establish clear program benefits, identify ways to measure those program benefits, clarify the specific individuals or groups for which the program's benefits are intended, and design program services to reach that audience and achieve the desired results (Kusa et al., 2023). Formative evaluation is designed to allow programs to self-assess for continuous improvement (Buelin et al., 2019; Conderman et al., 2020).

The outcomes-based portion will evaluate the sum of all the program and project goals at the end of every academic year. Each of the four PD activities is expected to be completed within three months of Liberia's traditional 10-month academic year.

Formative evaluation will be conducted at the end of each of the activities. Outcome-based will be conducted at the end of each segment or academic year to indicate the total or combined achievement.

Stakeholders will be Ministry of Education officials and donors who will provide funding for the policy proposal. USD leaders will manage and monitor the reform process and teacher PD facilitators will implement the proposal. Teacher participation will be key to the data collection and overall goals evaluation of the policy proposal. Students are stakeholders because the overall success of the program depends on their academic performance.

Project Implications

The possible social change that will occur when this policy proposal is approved and implemented is the creation of social behavior change throughout the district. This study sought to understand the perception of secondary teachers on the existing PD at

their school district. The findings from this research revealed that the teachers perceived the PD as weak and required refinement. Following the successful implementation and evaluation of the policy proposal, teachers' practice may be refined, students test scores may improve, and the perceptions about the district PD may change.

Importance of the Project

This project is important to local stakeholders because of the prevailing situation in the Liberian educational sector. In addition to deficient performance on the annual regional exams, many Liberian students who complete grade 12 are performing below level. High school graduates hardly pass job placement interviews and college matriculations tests. At interviews, they do not satisfactorily articulate to acquire employment with agencies that insist on perfect communication and demonstration of intelligence at their proposed education levels. In various sectors including health, education, and finance, the entry bar must be lowered to balance the demand of staff with supply.

In addition to the education sector, this situation has caused gaps in many sectors of the Liberian governance system. College matriculation exams are compromised because of deficient performance of prospective college first-year students. Due to compromised college matriculations, lecturers face huge challenges in imparting the required knowledge at the proper pace. This situation generated gross corruption among lecturers and students and has lowered the quality of Liberian education. In the executive summary of Liberia's 5-year education implementation, the introductory section confirms the learning gap and reads as follows:

The education sector faces a complex series of interrelated challenges, mostly related to the rebuilding and recovery from civil war, constrained national finances, poor infrastructure and, more recently, the Ebola epidemic. There is an increasing demand for education at all levels, particularly for quality livelihoods education for young women and men.

Learning outcomes remain below MoE expectations. Pass rates among students taking the West African Examination Certificate (WAEC) Grade 9 and Grade 12 examinations in 2014 were 60% and 47% respectively, representing declines from previous years. In addition, the reading levels of students in early primary grades are 17 below MoE benchmarks. A literacy assessment conducted in 2014 found that Grade 3 students' oral reading fluency in English was below 20 correct words per minute, which is significantly lower than the MoE benchmark of 45 correct words. The quality of teaching and learning in all education sectors are a major concern as enshrined in the MoE Republic of Liberia Getting to Best Education Sector Plan Y2017-Y2021.

The elements of this project are consistent with research findings and literature concerning the development of pathways to educational reform. The policy statement for this project provides specific language intended to articulate the policy to stakeholders and have been adopted by USD to improve teacher practice and student academic performance. The goals of the policy state what the policy is expected to achieve. The policy content details the steps and processes required for the instigation of any new program.

Section 4: Reflections and Conclusions

Project Strengths and Limitations

Performance reports from the WASSCE showed low test scores for Liberian students in an USD. As a mitigating effort, the USD launched a districtwide PD to enhance teachers' pedagogical skills and improve tests scores; unfortunately, the PD did not produce the expected outcomes. Consequently, I conducted this research to help district leaders obtain an understanding of the situation and take corrective actions. A policy recommendation position paper emerged as the deliverable of the findings of this study. The policy recommendation position paper was selected as the most appropriate pathway to reform the existing PD, after considering the following four genres: (a) evaluation report, (b) curriculum plan, (c) professional development training, and (d) policy recommendation with detail.

Firstly, an evaluation plan was not selected as the deliverable of the findings because, according to research, evaluation plans do not capture nuances inherent in participant responses (Kassab et al., 2020). The instrument I used to collect data for the study was interviews which usually contain perceptions and nuances that researchers analyze for conclusions. Secondly, I looked at curriculum plan as the deliverable for my study and found it was not suitable. As noted by Merik and Edmonson (2021), a curriculum plan limits what research can see and measure. A curriculum plan also limits what can be captured about teacher beliefs because teachers customize instructional practices based on their personal preferences. Since I sought to capture insights on teachers' perceptions on PD efficacy, a curriculum plan was not suitable as a deliverable

of my study. Thirdly, from the findings of this study, I discovered that while a PD plan may offer opportunities to hone teachers' skills (see Wynants & Dennis, 2018), it was not suitable because PDs usually fail when factors such as a lack of resources and methods of facilitation are identified as challenges. After investigating the appropriateness of those genres with the conceptual framework of this study, I selected a policy recommendation. Although the policy recommendation project was selected as the suitable project genre, its strengths and limitations were noted.

Project Strengths

There are specific situations that indicate strengths and weaknesses of policies. As noted by Gunningham and Sinclair (2019), the strengths and weaknesses of a policy are determined by several factors. For example, the quality of guidance, clarity and consistency are characteristics of a strong policy. In addition, the efficiency of an outcome-based policy during or after implementation, risk management and legal compliance awareness are all further aspects of a strong policy (Guo et al., 2020).

The key strength of this policy recommendation proposal was that the collection of primary data was collected directly from the end users. The decisions informing its development are based on findings from the project study. In addition, insights from the perceptions and voices of teachers who will be the end users were coordinated as the basis for the project goals. The next indication of strength of the project was that stakeholders can easily relate to the position statement and support the PD reform pathway. For example, the proposed reformed PD will be a quarterly ongoing process instead of the traditional semester workshop events and will be based on real life

experiences and TL strategies. Teachers may willingly attend the PD because of benefits or credits they would accrue in addition to the TL adult learning techniques. The modules and units of the PD contain practical activities on how to include transformational learning and other andragogical or adult learning strategies in their instructions.

Project Limitations

Policy proposals have limitations in implementation due to factors that research show are weaknesses. Gunningham and Sinclair (2019) identified lack of flexibility, rigidity, complexity, and stakeholder opposition as indicators of policy weakness. A key limitation that could challenge the implementation of this project is stakeholder opposition. While findings from the study show the USD PD have weaknesses that require strengthening, the process could be resisted because of personal or political interests. The lack of resources to train teachers and to teach students was another weakness. This theme resonated throughout the findings of the study. Despite the anticipated acceptance and approval of the policy recommendation proposal by district leaders and stakeholders, a lack of funding could impede the roll out and implementation of the project. The length of time that the USD would take to process relevant documents for budget approval could slow down the implementation process.

I also anticipate a conflict in the implementation timeline of the project as one of the limitations of the reformed PD project. The project has a 2-year implementation timeline but offers options which teachers can use to accrue required credits to maintain their employment. There will be a conflict because of the challenging financial situations among Liberian teachers that are exacerbated by low salaries. Consequently, teachers

often take employment at more than one school which are usually far apart. There would be challenges in managing their teaching schedules and completing PD on time. This could lead to an increase in the attrition rate in USD whereby teachers could leave the district and take employment at private schools that usually offer higher salaries but do not have compulsory PD attendance. Another limitation is that the findings from the study are not based on the perceptions of principals and district leaders but rather the teachers. As a consequence, inclusion of school leader perceptions to dilute bias in the voices of the teachers were not considered during the research.

While the strengths and limitations of the project were identified from different perspectives, they serve as significant directions towards the goal of the project. USD leaders can use the limitation as key evaluation indicators by designing pre-mitigation means in case they emerge early or later in the project implementation. The strengths identified are opportunities that USD leaders can use as requirements which will be counted as successes of the project. The limitations and strengths identified complement one another and position the project as a delivery that is aligned with the study.

Finally, policies, whether in a business, government, or organizational context, have both strengths and weaknesses. The effectiveness of a policy often depends on its design, implementation, and the specific circumstances surrounding its application. There are usually some general strengths and weaknesses associated with policies (Gunningham & Sinclair, 2019; Heikkila & Cairney, 2018). The skills from the reformed PD will help to close learning gaps in the greater Liberian educational sector when the MOE conducts its regular county wide district capacity development activities. USD facilitators and

teachers who would participate in the national PD events could serve as resource persons when issues arise in the application of transformative learning strategies. The skills offered by the reformed PD would benefit the Liberian education sector and the USD.

Recommendations for Alternative Approaches

The problem I sought to understand was the situation of an urban school where student test scores were low and indicated a gap between teaching and student academic performance. To address the problem, USD district leaders launched a PD to enhance teacher skills. Despite this action, the tests scores remain low for 3 years from 2013 - 2018. The situation left USD leaders concerned over why, despite the regular PD, student tests scores were still low. To address the local problem I analyzed perceptions of teachers and acquire an insight to their perceptions regarding the strength and weakness of the existing PD. Findings from the study did not dismiss the continuation of the PD but instead proposed a policy to globalize it by reforming it into a nonconventional format with research-based adult learning content.

Different Ways to Address the Problem

The purpose of this qualitative study was to explore Liberian secondary teachers' perceptions on the strength, weakness, and recommended improvements of the PD at USD. The problem I addressed was that student test scores at an urban school district did not improve despite a districtwide mandatory PD program. The perceptions were gleaned from teachers so the way principals and district leaders felt about the PD was not considered. Consequently, the recommendations for the reformed pathway were based on the ways teachers felt about the existing PD and not the way senior staff felt. In addition,

the focus is on building the efficacy of teachers by offering nonconventional adult learning strategies which they will use to teach USD secondary school students and not how well the PD should be sourced and managed.

A different way to address the problem is to conduct two other studies. The purpose of the first would be to explore the perceptions of principals and the other would be to explore the perceptions of district leaders. While principals may be focusing on teacher quality, the district leaders would focus on availability of resources and teacher quality. District leaders would focus also on availability of resources for the operations of the schools and the MOE and district recruitment policy that generated teachers who were not trained and needing PD. The focus of the district research would also focus on the impact that MOE policies have on the USD. School leaders such as principals and district officers are not trained because firstly, there are a considerable number of teacher training institutions and few school leadership training groups. Secondly, the government does not make school leadership training compulsory. Research on senior education staff's perceptions and a policy position statement for the launching of a PD to build their capacity could be a different way to address the USD PD problem both from a holistic teacher and school leadership perspective.

Alternative Definitions and Alternative Solutions of the Problem

The USD PD was not meeting expectations despite a program to build teacher capacity. An alternative definition of the problem is that district leaders and school principals are not trained to mentor, coach and supervise untrained teachers in the USD. As a result of this situation, sufficient interventions were not made to evaluate the

existing PD for the 3 years that student tests scores did not improve and produce changes. The alternative solution is to launch a district wide mandate for all supervisory staff including district officials to attend PD to also accrue professional credits in school leadership.

Another way to define the problem is to recognize the role and benefit of a monitoring, evaluation, and learning (MEAL) system and orientate district supervisors and principals in using it to track achievements and challenges. The district could recruit professional services to develop such a plan and train its senior staff to manage it. In addition, the district should enter into a contractual agreement with professional educational training groups to provide mentoring and coaching services to novice teachers, and supervision skills to veteran teachers and school principals. This contractual agreement should contain the development of tool kits that beneficiaries can access for self-directed learning activities. When these alternative recommendations are received and implemented, the pathway to the reformed PD would cut across the whole district in response to the findings of this study.

Data from the study indicated the need to reform the PD from conventional learning to nonconventional leaning. A policy recommendation proposal was suggested as the pathway to the reform. While the approval of a policy recommendation was the suitable reform pathway, there are alternative ways to address the problem. From 2013 to 2021, the Liberian educational system employed several interventions as pathways to improving its quality. The instructional period PD, half day or early dismissal PD, in-

service and in-school quick impact PD and outsourcing PD are alternative ways recommended.

Instructional Period PD Approach

An alternative means to reform the PD and educational sector of Liberia can be the instructional period PD mandate. The academic school year in Liberia is divided into six instructional periods each comprising 6 weeks of instruction and testing (Sherman, 2022). At the end of each instructional period, teachers are offered days off to evaluate and reflect on their challenges and lessons learned over the 6 weeks. The district can conduct quick impact PD workshops at the conclusion of each instructional period as an alternative means of implementing the proposal.

Half Day/Early Dismissal Approach

On early dismissal days, students leave school early to allow teachers to attend departmental or whole school instructional planning sessions. The early dismissal days can be used to implement the “Reform PD Pathway” and serve as the reform pathway. Instead of suggesting contents for the early dismissal day events, the contents of the reformed PD can be integrated and used as an alternative. While early dismissals are often misused by teachers for triviality, they foster and promote social change through the interactions and camaraderie among teachers when they meet (Sherman, 2022). This is an essential component of schools that establish professional learning communities.

In-Service Certification Teacher Training

Two common means of building teachers’ capacity in Liberia are preservice and in-service teacher training. Preservice teacher training is designed for individuals who

propose to become teachers (Odour, 2016). In-service teacher training is for teachers who are already teaching in the classroom but have not attended teacher training (Odour, 2016). The goal of this proposal is to improve the teaching practices of teachers in the USD PD; hence, in-service PD can be the preferred reform pathway to reform the PD. There are private teacher training institutes that train teachers and conduct professional development for schools and school districts. When the teachers complete the training at the private institutes, they are awarded certificates that are honored by the Ministry of Education of Liberia. The certificates can be used as indicators that USD teachers have acquired the required credit-based PD training.

Outsource the PD Facilitation

The district leaders could outsource the PD reform pathway proposal to private institutions to implement. While the policy recommendation project proposes a PD project as the delivery of this study, it also suggests diverse ways of rolling out the reformed PD. The rationale for suggesting many ways is to avoid interruptions in the academic calendars and to ensure all teachers participate at their convenient time to avoid gaps in their respective teaching and personal professional growth. This table is a representation of the recommendations for the various alternative ways USD leaders can adopt to implement the reformed PD.

Table 4*Alternative Ways to Implement Project*

| Alternative ways to conduct reformed PD | Descriptions | Target groups | Responsible persons | Goals |
|---|---|---|--|--|
| Instructional period PD | Teachers meet in teachers' lounges or library to discuss issues weekly or bi-weekly lesson delivery | Subject area teachers | Subject area chairpersons | To identify gaps that may exist in the content delivery of each teacher. Take actions to close identified gaps |
| Half Day - Early Dismissal PD | School dismisses students early for teachers to attend peer-led or facilitator-led PD | All teachers All principals | External Facilitators Subject area Chairpersons | To identify challenges and successes in delivering contents of the previous 6-week period and review contents of the next period |
| In-service teacher training PD | Teachers attend training every Saturday for 10 months | All teachers who are not trained by any recognized teacher training institution | External teacher training institutes | To build capacity of teachers and qualify them for certification |
| Outsourcing PD | Certified teacher trainers are deployed at schools to offer shadowing, coaching and mentoring services. | All subject area teachers | External teacher training institutes | To build capacity of teachers and qualify them for certification |

Scholarship, Project Development, and Leadership and Change

Reflective Analysis as a Scholar Practitioner

My initial goal for a doctoral degree was to enhance my chances of having a louder voice in the plethora of educational reforms taking place across the globe in 21st Century. To achieve this goal, I set out to acquire a doctoral degree to increase my chances for appointment as a senior education leader at any school district in the United States or the Government of Liberia. This goal transformed into a more professional aspiration when I reached the research proposal and implementation stages of my study. The reminders I received from my committee members for thoroughness and diligence helped to remodel my goal from a degree holding jobseeker to a future scholar practitioner.

As a lifelong learner with over 3 decades of teaching experience and selecting to pursue a doctoral degree past age 55, my journey has been a complete uphill venture yet an incredible learning curve. I began my doctoral journey with a goal to advance my education career and equip myself with a louder voice in educational reforms in minority communities and developing country school systems. The courses I completed at Walden portrayed premature indications and confidence that the path I had taken would be extremely easy and I would soon be an authority that would move educational reform policy dialogues. My confidence level was high because I had already completed two master's degrees in education from St. Joseph and Harvard universities before coming to Walden. Unfortunately, while at those institutions, I was not required to author theses but rather completed my degrees through projects, mentoring, coaching and supervisory

strands. I realized at the prospectus and proposal stages that I seriously lacked scholarly writing skills and needed to submit myself to additional reading, feedback, and supervision. I became a researcher as I discovered the difference between seminal work and peer reviewed articles.

An incredible scholarly experience from this project study was my internalization of the construct “saturation” In developing the study, I struggled to comply with the segments and requirements of the checklist. For example, the articulations, citing, paraphrasing, and summarizing the resource literature led to a significant increase in the number of references I earlier planned to access. As I complied with the APA seventh edition requirements to give my paper a significant scholarly tone, I realized that I had cited more than sufficient research literature than I had planned. This left me with a learning that saturation is a key authenticity of scholarship. In addition to the experience from the saturation internalization, , the interview stage offered an important opportunity for the paper to reach saturation. When I left the United States to visit Africa to conduct the member check or trustworthiness the experience also helped to saturate the content. In the process, I discovered that the face-to-face engagement helped me capture additional information to the virtual interviews conducted via ZOOM. This event was also another major learning curve in my doctoral journey.

Reflective Analysis as a Project Developer

I had already served as project staff and project developer for at least eight years with many international and national development agencies before beginning my doctoral journey. During the 14-year Liberian civil war, I served as Field Officer for the

International Committee of the Red Cross (ICRC) and managed several relief and humanitarian projects for displaced people. On the cessation of hostilities, I worked with the United Nations High Commissioner for Refugees (UNHCR) as Field Assistant at several duty stations and responsible to prepare and implement short term refugee education, and care and maintenance projects. When field activities closed down, I transferred to the United Nations Office for Project Services (UNOPS) as field officer responsible for reintegration and resettlement projects in the rural areas. At those jobs, development of emergency education programs, accelerated education curriculum, school reform projects, including teacher recruitment and training were regular activities. It was based on those experiences that I arrived at my doctoral studies with exceptional confidence. Fortunately, the experiences proved to be rewarding in developing the Reformed Pathway PD project as the deliverable of this project study.

Reflecting on my experience as a project developer, I saw a strong relationship between my past project management experiences and the development of the policy recommendation project for this study. I observed that the processes from the conception of the project, the implementation, the evaluation of the outcomes and sustainability mechanisms were similar. As noted by Myers and Wong (2019), a key factor that drives the implementation of a policy recommendation project is the achievement of measurable outcomes. During my sojourn as project officer, the supervisors and donors emphasized a similar factor. This awareness was transferred to the development of the USD policy recommendation project. Another factor that informed the project was utilization of the findings and voices of the participants. As a project developer, I learned that existing data

is important in identifying anticipated outcomes of projects, and prior experiences can serve as additional support. The data existing data helped to make the project needs driven.

Leadership and Change

My goal is to participate in transformational social leadership instead of being an authority who is equipped with knowledge and power. Canterino et al. (2020) noted that leading change is an enduring managerial challenge that encompasses individual and collective efforts within an organization. At this point in my doctoral journey, I have obtained sufficient understanding of the kind of social change leader I sought to become. As suggested by Afroz et al. (2021), transformational leadership significantly influences employee trust in leadership and champions behavior during organizational change. At the midpoint of this doctoral journey, I realized that a key role as a transformational social change leader would be to participate in the facilitation of the gradual alterations in behavioral patterns, social institutions, cultural norms, and social structures for the benefit of the society in which I will be involved. Despite the consciousness that my goal was to lead educational reform, I did not identify the specific types of social changes that could lead to my success.

As I approach the endpoint, I am aware that one of my roles a transformational change leader is to participate in activities that would impact economic change, technological change, demographic change, legal and environmental change, and demographic change. Over this journey, Jack Mezirow's transformational learning theory helped to identify the genre of social change I want to make in the educational system of

my society in Liberia and the United States where I have served as teacher and educational leader, respectively. Finally, this doctoral journey has taught me that change must occur in order for educational leaders to address the current needs of those they lead and teach.

Reflection on the Importance of the Work

The importance of this work cuts across the whole education sector of Liberia. It is important to teachers, principals, districts leaders, the Liberian Ministry of Education, and the larger professional society. It is also important to me as a research practitioner because the experience improved my problem-solving capacity. During the process, I acquired significant skills in using scholarly language and organizing and managing investigations in the form of research. The study is important because it provided a new perspective that research is essential for advancing knowledge and solving problems.

The importance of the study to teachers is that it offers opportunities for improvement. In addition to the non-conventional nature of the reformed PD, the work provides a career pathway for teachers by proposing credits for PD attendance. The work is important to district leaders because it provides a mechanism or system for them to measure the achievements of the PD and gives them an insight into the value for money spent to operate the USD PD. The work also presents a platform for more collaboration between school principals and district leaders in managing teaching, learning, and supervision in the USD.

Overall, my understanding of the importance of research is that it is essential for advancing knowledge and solving problems. For example, when the USD PD did not

meet expectations, district leaders did not have data to understand the gaps. To offer research data driven response to the USD, I conducted this study to help drive innovation, inform policy, enhance education, promote economic growth, and foster social change with the USD. The response was divided into two interconnected components. The first component was the research on how teachers felt about the existing PD, and the second was the innovative aspect of developing a reformed PD. Another importance of this work is that it is situated as a tool or practical activities based on research that can be applied in fixing an existing system. When the policy recommendations are approved and the PD is reformed, district leaders will more clearly see the importance of this work. The MOE and other stakeholders would receive learning losses and learning gain reports that represent teachers, principals, and district leaders efforts in mitigating the challenges in the education sector. Overall, my understanding of the importance of research is that it is essential for advancing knowledge and solving problems.

Implications, Applications, and Directions for Future Research

The purpose of this qualitative study was to explore Liberian secondary teachers' perceptions on the strength, weakness, and recommended improvements of the PD at USD. The data collected addressed the three research questions:

RQ1: What are Liberian secondary teachers' perceptions on the strength of the PD at USD?

RQ2: What are Liberian secondary teachers' perceptions on the weakness of the PD at USD?

RQ 3: What are Liberian secondary teachers' perceptions on the recommended improvements of the PD at USD?

The findings have implications for enhancing the pedagogical skills of teachers. There are also implications for refining the curricula and instructional leadership skills of school principals and district leaders. School principals, district leaders, and other stakeholders can use the findings to direct teacher professional growth and conduct data driven evaluations. School district leaders and policymakers could use the findings to reform and supervise teacher evaluation processes so that they receive frequent and timely feedback on their instructional practices. The potential impact on social change of this project is rebranding of the USD PD from deficient to productive. Social change will occur when teachers' skills are built to deliver pedagogy using research-based strategies. There would be a transformational change among USD teachers resulting to social behavior change towards teaching, learning and professional development. For example, teachers would better understand the importance of PD, facilitators would become conscious of the benefits in integrating research-based adult learning strategies in their presentation skills, and stakeholders would change their perceptions of the USD. The sum total of these identifies the potential social change situations at the USD.

This study focused on the perceptions of secondary school teachers in an urban school district. Future researchers could focus on the perceptions of secondary school teachers in rural school districts. Research on the future could also focus on primary school teachers because sixth graders in Liberia also take summative tests. The completion of those future research would offer much more insight into the whole

Liberian education sector. One of the reasons for this study was the situation at the USD which was a spillover from the general deficient educational system of Liberia. Research at the primary and secondary school levels could present a full picture of the Liberia educational system. The findings from that research could help stakeholders and policy makers inform research-based decisions.

Conclusion

Over the last four decades from 1983 to 2023, I have always propounded that the ultimate goal of all that we do as teachers and educators including the interventions launched to reform school is simply for a child to learn, no matter where that child finds themselves. This thinking about pedagogy is deeply rooted in my experiences while a student at a one-room church house public school in a small town across Liberia's second largest river, the Cestos River, where I completed sixth grade in 1973. The school was operated by a single teacher who was also the registrar and principal.

Instruction was delivered like a transistor radio with "on," "off," and "pause" buttons. Following Sunday services, the benches were grouped into various sections of the church house depending on the number of students. Kindergarten had the highest number of benches because families who failed to send at least one of their children to school at the "ear touching age" paid huge fines imposed by the teacher and enforced by the town chief. The Chief had authority to confiscate livestock or personal properties if the fines were not paid because the refusal to send a child to school was considered a crime against the whole chiefdom. The shared goal of the town was for at least one child to complete grade six and leave the town and go to the city school with the hope that they

would return one day with support. The graduation events were sacred and marked by rituals and lavished festivities. Before I left Neegbah Public School, I was the only sixth grade student in a mixed group of sixth and fifth graders. By virtue of my grade level, I was the school president, student representative and secretary to the Town Chief.

Every morning the teacher would first assign lessons to each group to recite or write, similar to the way doctors make rounds in a hospital ward. He would then stand in the middle of the church house and raise his hands for attention and say, “A concentrated mind” and we would respond, “Is never disturbed” When he lowered his hands, learning started all over the church like a confused Babel. The kindergarten, first and second graders simultaneously recited the alphabet and multiplication tables so loud that the noise was deafening. In this noise, the teacher took turns with the other classes. At the end of each period, the teacher stood in the middle of the school, raised his hands, and dropped them indicating all lessons should stop and we should be quiet.

Neegbah Public School was agreeably the least in the county. When we crossed the river to attend school district functions, we were jeered at, and called names; we were either noticed last or sometimes not noticed at all. During parades we wore unattractive khaki suits and were placed at the rear. Those days there were American and Canadian Christian mission schools that displayed modern teaching methods and learning environments more appropriate than our one-room school. Despite our school’s learning situation, I took the regional primary level examinations and passed. I still believe to this day that if district leaders had a choice, they would have excluded our school because of the learning environment. Fortunately, on the day of the exams, I discovered that most of

the exam questions came from the contents that the students regurgitated every day in the open church house schoolroom.

Back in the day in Rivercess, exam results were announced publicly in the City Hall. The school and the names of every student that passed and failed were announced. All of the examinees and school leaders including principals and missionaries were usually present to celebrate their successful students. The examiner paused when he called, “Neegbah Public School, Moses B. Jackson” He narrated how he had paid surprise visits to our school and left with wrong impressions. He told the tension packed audience that I had not only passed the exams but was among the first three high performers. Before he could end his speech, the villagers lifted the teacher shoulder high and returned to the village in jubilation. Although I was the one who sat and passed the exams, nobody referenced me for days. I wondered why this was happening, but my answer came when the whole town locked down and all activities ceased to celebrate my graduation from the sixth grade.

On graduation day, the whole town locked down in festivities. I got dressed in an extremely expensive suit my mother may have procured years ago. The cultural dancers, the church choir and the elders were all at their best. As my mother, (Nay, as we referred to her) paraded me around the town from house to house, the drummers followed and encouraged Nay to do more singing and dancing than crying. Nay cried out of joy, and also that Pa had not lived to witness this precious achievement of his own “book man” Amidst thunderous applause, Nay cried and sang as we entered the church house which had been transformed into a beautifully decorated graduation hall. I did not guess that the

pensive mood of my teacher was preparation for him to offer my lifetime professional aspiration and mantra.

My Lifetime Inspiration and Mantra

In his farewell speech, my teacher whose mantra had been “A concentrated mind is not disturbed,” struck me with a new mantra which to this day has been the pathway to my success in education. The teacher began with apologies to everyone attending the graduation. To the parents and guidance, he apologized for the huge fines imposed when their children missed days at school, and for the instances where he kept them away from helping with farming chores. To us students he apologized for the harsh method of impacting knowledge. The lashes we received for disturbing our classes and the ones we endured for failing tests. He apologized for making us do our work over and over until we got frustrated as he showed no sympathy. He continued, “The reason I did all of this was for one child from this village to learn and be adequately prepared for the future. Today it is Mosse Jackson who has made us proud, but tomorrow, if we all understand that our collective actions and thinking about the reason for school is for one single child to learn, this village would produce many educated giants.

Later on in my academic sojourn, after reading other literature on the purpose of education, I reflected and paraphrased my teacher’s admonition that the ultimate goal of any educational intervention is for a child to learn. The essential goal for the creation of school districts, appointments of secretaries of education, establishment of teacher colleges and awarding of degrees in education is for at least one child to learn. That child could be in a low-income community where hallway fights and gang activities disrupt

classes and police regularly intervene; that child could be the young boy or girl whose parents are on drugs and portraying a bad image each day; that child could be living with a single mother whose husband is serving a long jail term; more important, that child could be the barefooted son or daughter in a village whose parents can hardly afford breakfast nor khaki school uniform. If only such a child can learn from our interventions, then education has achieved its ultimate goal.

This is the mind I have carried throughout this study and the development of the project. The ultimate goal informed my choice of the policy recommendation proposal. If I were asked, “What is the goal of this reformed PD that you are proposing?” My answer would be the following long statement:

The goal of this policy reform recommendation proposal is for teachers to build their teaching capacities so that they teach well for students to learn and exemplify their learning by their performance on tests. We teachers are always unfairly evaluated because our efficacy is not measured by how well we teach but how well those we teach perform on tests that are sometimes not prepared by us. If 80% of a class passes a district benchmark test, that teacher would be branded “good teacher” Conversely, if 80% failed, their teaching efficacy would be questioned. This situation transcends to the district level. When tests scores of students in a district are low, some of the schools are placed under administrative supervision while others are closed down. It is to those ends that I maintain that the ultimate goal of educational interventions should be for a child to learn, wherever they find themselves.

This is the thinking that grounded my study on the perceptions of teachers and the resulting reform pathway policy recommendation. The focal urban school district has been branded “poorly performed” over the last seven years. The deficient performance status was reached when districtwide low student test scores did not improve despite series of interventions including a mandatory PD. An adequately reformed PD which is the product of my study in itself cannot be considered the solution to rebranding the USD. Instead, the solution would be student performance which is a factor of good teaching but hardly controlled by teachers. A teacher can therefore only be hopeful that students perform well so that they can make a name as “good teachers.”

The social changes that may be realized by the USD are when the reformed PD is launched, and student test scores improve. Education can help teachers embrace social change by changing their perceptions and broadening their thinking about the quality of their capacity development programs. The social change in USD will be how the attitudes, customs, beliefs, and values of the district change from conventional to non-conventional pedagogy. The district would hold an appreciable position in the community because it would be re-branded. The perceptions of Ministry of Education officials about the quality of students produced by the district would change. Teachers would acquire a sense of belonging and self-efficacy. Students would be motivated to retain their status and society would appreciate the innovative approaches of the reformed PD and may adopt it and apply it to another district PD’s. This would be an exceptional social change situation as propounded my Walden University. This is my story and the summary of the aspirations that ground this research project study.

References

- Abbiati, G., Argentin, G., Caputo, A., & Pennsi, A. (2022). Repeti luvant? a repeated randomized controlled trial on the effectiveness of an at-scale teacher PD program. *Evaluation Review*, *46*(5), 578-597.
<https://doi.org/10.117/0193841X211055354>
- Abdul Rahman. (2021). High participation, low impact: The challenge for teacher PD in Indonesia. *International Journal of Pedagogy and Teacher Education*, *5*(1), 1–10.
<https://doi.org/10.20961/ijpte.v5i1.46636>
- Afroz, R., Islam, N., Rahman, S., & Anny, N. Z. (2021). Students' and teachers' attitude towards online classes during COVID-19 pandemic: a study on three Bangladeshi government colleges. *International Journal of Research in Business and Social Science* (2147-4478), *10*(3), 462-476.
- Ajani, A. A. (2019). Understanding teachers as adult learners in PD activities for enhanced classroom practices. *AFRIKA Journal of Politics, Economics, and Society*, *9*(2). <https://hdl.handle.net/10520/EJC-1a8098828a>
- Alenezi, H., Ihmeideh, F. M., & Alshaboul, Y. (2022). Kindergarten teachers' challenges in teaching English as a foreign language to children. *International Journal of Early Years Education*, 1–16. <https://doi.org/10.1080/09669760.2022.2137782>
- Almumen, H. A. (2020). Universal design for learning (UDL) across cultures: The application of UDL in Kuwaiti inclusive classrooms. *Sage Open*, *10*(4), 2158244020969674.

- Anlimachie, M. A. (2019). Understanding the causes of students' weak performance in geography at the WASSCE and the implications for school practices; a case of two senior high schools in a rural district of Ghana. *International Journal of Research and Innovation in Social Science (IJRISS)*, 3(3).
- Avidov-Ungar, O. (2023). The professional learning expectations of teachers in different PD periods. *PD in Education*, 49(1), 123–134.
<https://doi.org/10.1080/19415257.2020.1763435>
- Avsec, S., & Savec, V. (2021). Pre-service teachers' perceptions of, and experiences with, technology-enhanced transformative learning towards education for sustainable development. *Sustainability*. <https://doi.org/10.3390/su131810443>
- Aydarova, E., & Berliner, D. C. (2018). Navigating the contested terrain of teacher education policy and practice: Introduction to the special issue. *Education Policy Analysis Archives*, 26, 25-25.
- Azevedo, J. P., Hasan, A., Goldemberg, D., Geven, K., & Iqbal, S. A. (2021). Simulating the potential impacts of COVID-19 school closures on schooling and learning outcomes: A set of global estimates. *World Bank Research Observer*, 36(1), 1-40.
- Babbie, E. (2017). *Basics of social research* (7th Ed.). Cengage Learning
- Bailey, A. C., Corrales, K. A., Rey-Paba, L., & Rosado-Mendihueta, N. (2022). Foreign language instructors' pd in times of crisis: challenges and solutions. *Ikala: Revista de Lenguaje y Cultura*. <https://doi.org/10.17533/udea.ikala.v28n1a01>

- Ba'Its, H. A., Puspita, I. A., & Bay, A. F. (2020). Combination of program evaluation and review technique (PERT) and critical path method (CPM) for project schedule development. *International Journal of Integrated Engineering*, 12(3), 68-75.
- Bajaj, P., Khan, A., Tabash, M. I., & Anagreh, S. (2021). Teachers' intention to continue the use of online teaching tools post COVID-19. *Cogent Education*, 8(1), 2002130.
- Bala, M., Kashuk, J., Moore, E. E., Catena, F., Leppaniemi, A., Ansaloni, L., Biffi, W., Cocolini, F., Peitzman, A., Sartelli, M., Sugrue, M., & Kluger, Y. (2018). Establishing position papers by the WSES. *World Journal of Emergency Surgery*, 13(1), 1-4.
- Bates, C. C., & Morgan, D. N. (2018). Seven elements of effective PD. *Reading Teacher*, 71(5), 623. <https://doi.org/10.1002/trtr.1674>
- Bayram, İ., & Canaran, Ö. (2020). Identifying the perceived PD needs of English for specific purposes (ESP) teachers. *Ilkogretim Online*, 19(3), 1647–1659. <https://doi.org/10.17051/ilkonline.2020.734559>
- Belotto, M. J. (2018). Data analysis methods for qualitative research: managing the challenges of coding, interrater reliability, and thematic analysis. *Qualitative Report*, 23(11), 2622–2633.
- Bergmark, U. (2023). Teachers' professional learning when building a research-based education: context-specific, collaborative and teacher-driven PD. *PD in Education*, 49(2), 210–224. <https://doi.org/10.1080/19415257.2020.1827011>

- Bernard, R. O. (2019). Nurse educators teaching through the lens of transformative learning theory. *Journal of Nursing Education*, 58(4), 225–228.
<https://doi.org/10.3928/01484834-20190321-07>
- Bigi, S. F. M. (2020). Fostering the creation of common ground between the academia and the profession: The ‘Position Papers Series’. *Patient Education and Counseling*, 103(12), 2393-2394
- Briese, P., Evanson, T., & Hanson, D. (2020). Application of Mezirow’s transformative learning theory to simulation in healthcare education. *Clinical Simulation in Nursing*, 48, 64–67. <https://doi.org/10.1016/j.ecns.2020.08.006>
- Buabeng, I., Ntow, F. D., & Otami, C. D. (2020). Teacher education in Ghana: Policies and practices. *Journal of Curriculum and Teaching*, 9(1), 86-95.
- Buelin, J., Daugherty, M., Hoepfl, M., Holter, C., Kelley, T., Loveland, T., Moye, J., & Sumner, A. (2019). ITEEA standards for technological literacy revision project: Background, rationale, and structure. *STLRevisionRationale06_28_2019.pdf* (2019)
- Burgin, R., & Flynn, A. (2021). Women’s behavior as implied consent: Male “reasonableness” in Australian rape law. *Criminology & Criminal Justice*, 21(3), 334-352.
- Burkholder, G. J., Cox, K. A., Crawford, L. M., & Hitchcock, J. H. (Eds.). (2020). *Research designs and methods: An applied guide for the scholar-practitioner*. SAGE

- Campos-Zamora, M., Gilbert, H., Esparza-Perez, R. I., Sanchez-Mendiola, M., Gardner, R., Richards, J. B., Lumbreras-Marquez, M. I., & Dobiesz, V. A. (2022). Continuing PD challenges in a rural setting: A mixed-methods study. *Perspectives on Medical Education, 11*(5), 273–280. <https://doi.org/10.1007/s40037-022-00718-8>
- Canterino, F., Cirella, S., Piccoli, B., & Shani, A. B. R. (2020). Leadership and change mobilization: The mediating role of distributed leadership. *Journal of Business Research, 108*, 42-51.
- Capel, M., & Schneller, P. (2022). Obama’s education policy: Is the price of the ticket a moral thicket?. In M. Grossman, R. E. Matthews, & F. Schortgen (Eds.), *Achievements and Legacy of the Obama Presidency: “Hope and Change?”* (pp. 47-59). Springer International Publishing.
- Carrasco, A., & Gunter, H. M. (2019). The “private” in the privatisation of schools: The case of Chile. *Educational Review, 71*(1), 67-80.
- Chafer, T. (2018). Conflicting modernities: battles over France’s policy of adapted education in French West Africa. *France's Modernising Mission: Citizenship, Welfare and the Ends of Empire*, 3-30.
- Chu, Z., Bian, C., & Yang, J. (2022). How can public participation improve environmental governance in China? A policy simulation approach with multi-player evolutionary game. *Environmental Impact Assessment Review, 95*, 106782.
- Cochran-Smith, M., Grudnoff, L., Orland-Barak, L., & Smith, K. (2020). Educating teacher educators: International perspectives. *New Educator, 16*(1), 5-24.

- Cohen, D. K., & Mehta, J. D. (2017). Why reform sometimes succeeds: Understanding the conditions that produce reforms that last. *American Educational Research Journal*, 54(4), 644-690.
- Cohen, D. K., Spillane, J. P., & Peurach, D. J. (2018). The dilemmas of educational reform. *Educational Researcher*, 47(3), 204-212.
- Conderman, G., Pinter, E., & Young, N. (2020). Formative assessment methods for middle level classrooms. *Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 93(5), 233-240.
- Creswell, J. W., & Creswell, J. D. (2018). *Research and design: Qualitative, quantitative, and mixed method approaches*, (5th ed.). Sage Publications.
- Daga, A. T., Wahyudin, D., & Susilana, R. (2023). Students' perception of elementary school teachers' competency: Indonesian education sustainability. *Sustainability*, 15(2), 919.
- Dassanayaka, D. M. C., Weerasinghe, I. M. S., Dahanayaka, S. N. S., Dedunu, H. H., Athurupana, K. A. H. M. K., & Muthuweera, N. K. G. (2022). Academics' attitudes towards online education amidst the Covid-19 outbreak. *International Journal of Educational Management*, 36(5), 661-677.
- Datnow, A. (2020). The role of teachers in educational reform: A 20-year perspective. *Journal of Educational Change*, 21(3), 431-441.
- Debray, A., Ruysen, I., & Schewel, K. (2023). The aspiration to stay: A global analysis. *International Migration Review*, <https://doi.org/10.1177/01979183231216087> .

- de Vries, J. A., Dimosthenous, A., Schildkamp, K., & Visscher, A. J. (2022). The impact on student achievement of an assessment for learning teacher PD program. *Studies in Educational Evaluation, 74*.
<https://doi.org/10.1016/j.stueduc.2022.101184>
- Dewi, S. S., & Dalimunthe, H. A. (2019). The effectiveness of universal design for learning. *Journal of Social Science Studies, 6*(1), 112-123.
- du Toit-Brits, C. (2020). Unleashing the power of self-directed learning: Criteria for structuring self-directed learning within the learning environments of higher education institutions. *Africa Education Review, 17*(2), 20-32.
- El-Bilawi, N. H., & Nasser, I. (2017). Teachers' professional development as a pathway for educational reform in Egypt. *Reflective Practice, 18*(2), 147–160.
<https://doi.org/10.1080/14623943.2016.1251406>
- Elliott, V. (2018). Thinking about the coding process in qualitative data analysis. *Qualitative Report, 23*(11), 2850-2861.
- Ellison, S., Anderson, A. B., Aronson, B., & Clausen, C. (2018). From objects to subjects: Repositioning teachers as policy actors doing policy work. *Teaching and Teacher Education, 74*, 157-169.
- Evmenova, A. (2018). Preparing teachers to use universal design for learning to support diverse learners. *Journal of Online Learning Research, 4*(2), 147-171.
- Feng, X., Helms-Lorenz, M., & Maulana, R. (2023). Profiles and developmental pathways of beginning teachers' intrinsic orientations and their associations with

effective teaching behaviour. *Learning & Individual Differences*, 107, N.PAG.

<https://doi.org/10.1016/j.lindif.2023.102362>

- Fotopoulou, V. S., & Ifanti, A. A. (2018). Pre-primary teachers' perceptions about professionalism and pd through the lens of transformative learning: A Case Study in Greece. *Global Studies of Childhood*, 8(2), 184–194.
- Fovet, F. (2020). Universal design for learning as a tool for inclusion in the higher education classroom: Tips for the next decade of implementation. *Education journal*, 9(6), 163-172.
- Fussy, D. S. (2019). The hurdles to fostering research in Tanzanian universities. *Higher Education*, 77(2), 283-299.
- Gezer-Demirdağlı, Ş., & Cavkaytar, A. (2022). Effectiveness of the online inclusive teachers' PD program on problem behavior. *Education & Training in Autism & Developmental Disabilities*, 57(1), 92–103.
- Godfrey, L., & Olson, C. B. (2019). Agency as the achievement of reform ownership: A case study of two middle school teachers' participation in the Pathway Project. *English Teaching: Practice & Critique*, 18(2), 249-262.
- Gunningham, N., & Sinclair, D. (2019). Regulatory pluralism: Designing policy mixes for environmental protection. In *Environmental Law* (pp. 463-490). Routledge.
- Guo, P., Saab, N., Post, L. S., & Admiraal, W. (2020). A review of project-based learning in higher education: Student outcomes and measures. *International journal of educational research*, 102, 101586.

- Havea, P. H., & Mohanty, M. (2020). Professional development and sustainable development goals. Springer Nature.
- Heikkila, T., & Cairney, P. (2018). Comparison of theories of the policy process. In *Theories of the policy process* (pp. 301-327). Routledge
- Hoggan, C., & Kloubert, T. (2020). Transformative learning in theory and practice. *Adult Education Quarterly*, 70(3), 295–307. <https://doi.org/10.1177/0741713620918510>
- Hyde, B. (2021). Critical Discourse and Critical Reflection in Mezirow’s Theory of Transformative Learning: A Dialectic Between Ontology and Epistemology (and a Subtext of Reflexivity Mirroring My Own Onto-Epistemological Movement). *Adult Education Quarterly*, 71(4), 373–388. <https://doi.org/10.1177/07417136211003612>
- Japee, G., & Oza, P. (2021). Curriculum and evaluation in outcome-based education. *Psychology and Education Journal*, 58(2), 5620-5625.
- Johnson, K., & Olanoff, D. (2020). Using transformative learning theory to help prospective teachers learn mathematics that they already “know.” *Mathematics Enthusiast*, 17(2/3), 725–769. <https://doi.org/10.54870/1551-3440.1502>
- Kassab, O., Mutz, R., & Daniel, H. D. (2020). Introducing and testing an advanced quantitative methodological approach for the evaluation of research centers: a case study on sustainability science. *Research Evaluation*, 29(2), 135-149.
- Kennette, L. N., & Wilson, N. A. (2019). Universal design for learning (UDL): Student and faculty perceptions. *Journal of Effective Teaching in Higher Education*, 2(1), 1-26.

- Khan, A. S. (2022). Blended Learning Is The New Normal For Current Education Scenarios”. *Webology*, 19(3), 2987–3001.
- Klees, S. J. (2018). Liberia’s experiment with privatizing education: a critical analysis of the RCT study. *A Journal of Comparative and International Education*, 48(3), 471-482.
- Knowles, M. (1970). *The Modern Practice of Adult Education: From Pedagogy to Andragogy*, viewed 22 August 2019, <https://pdfs.semanticscholar.org/8948/296248bbf58415cbd21b36a3e4b37b9c08b1.pdf>.
- Kruger, C. G., & Buley, J. (2022). Collaborative learning to foster critical reflection by preservice student teachers within a Canadian-South African Partnership. *Journal of Teaching and Learning*, 16(3), 69–95.
- Kumar, R., & Kumar, K. (2022). Pedagogy Toward Outcome-Based Engineering Education: The State of Art. *Engineering Pedagogy Towards Outcome-Based Education*, 3-22.
- Kurnia, R. P. (2021). A case for Mezirow’s transformative learning. *Diligentia: Journal of Theology and Christian Education*, 3(1), 73-82.
- Kusa, W., Zuccon, G., Knoth, P., & Hanbury, A. (2023, August). Outcome-based evaluation of systematic review automation. In *Proceedings of the 2023 ACM SIGIR International Conference on Theory of Information Retrieval* (pp. 125-133).

- Lai, Y., Saab, N., & Admiraal, W. (2022). University students' use of mobile technology in self-directed language learning: Using the integrative model of behavior prediction. *Computers & Education, 179*.
<https://doi.org/10.1016/j.compedu.2021.104413>
- Larsen, E., & Allen, J. M. (2023). Circumventing erosion of professional learner identity development among beginning teachers. *Teaching Education, 34*(1), 78–94.
<https://doi.org/10.1080/10476210.2021.2011193>
- Leong, S. (2020). Self-Directed Learning: A Core Concept in Adult Education. *Education Research International*. DOI: 10.1155/2020/3816132.
- Lepri, B., Staiano, J., Sangokoya, D., Letouzé, E., & Oliver, N. (2017). The tyranny of data? the bright and dark sides of data-driven decision-making for social good. *Transparent data mining for big and small data*, 3-24.
- Liberia Ministry of Foreign Affairs. (2011). *New Education Reform Act of 2011*.
<https://planipolis.iiep.unesco.org/en/2011/education-reform-act-2011-5902>
- Lichter, J. M. (2017). *A History of Federally-Mandated Assessments in Education: From A Nation at Risk (1983) to the Conclusion of No Child Left Behind (2016)*. The University of Nebraska-Lincoln.
- Liu, J. E., Lo, Y. Y., & Lin, A. M. Y. (2020). Translanguaging pedagogy in teaching English for Academic Purposes: Researcher-teacher collaboration as a PD model. *System, 92*. <https://doi.org/10.1016/j.system.2020.10227>

- Liu, K., & Ball, A. F. (2019). Critical reflection and generativity: Toward a framework of transformative teacher education for diverse learners. *Review of research in Education, 43*(1), 68-105.
- Liu, X., Yang, Y., & Tripp, J. (2022). Effects of teacher pd and science classroom learning environment on students' science achievement. *Research in Science Education, 52*(4), 1031–1053. <https://doi.org/10.1007/s11165-020-09979-x>
- Lorente-Echeverría, S., Murillo-Pardo, B., & Canales-Lacruz, I. (2022). A Systematic Review of Curriculum Sustainability at University: A Key Challenge for Improving the PD of Teachers of the Future. *Education Sciences, 12*(11), 753. <https://doi.org/10.3390/educsci12110753>
- Louws, M. L., Meirink, J. A., van Veen, K., & van Driel, J. H. (2017). Teachers' self-directed learning and teaching experience: What, how, and why teachers want to learn, *Teaching and Teacher Education, Volume 66*, pp171-183, ISSN 0742-051X, <https://doi.org/10.1016/j.tate.2017.04.004>.
- Lozada, N., & Johnson, A. T. (2019). Perspective transformation in the supplemental instruction (SI) leader. *Journal of Transformative Education, 17*(2), 112-132.
- Mann, G., & Willans, J. (2020). “Monkey see, monkey do, that’s not going to actually teach you”: becoming a self-directed learner in enabling mathematics units. *Student Success, 11*(1), 55–65.

- Mason, M., Galloway, D., & Joyce-Gibbons, A. (2018). Closing the attainment gap: collaboration between schools in Sierra Leone. *Educational and child psychology.*, 35 (1). pp. 27-39.
- Matsuo, M. (2019). Critical reflection, unlearning, and engagement. *Management Learning*, 50(4), 465–481. <https://doi.org/10.1177/1350507619859681>
- Mayer, D. (2021). The connections and disconnections between teacher education policy and research: Reframing evidence. *Oxford Review of Education*, 47(1), 120-134.
- Mbeau-ache, C., Banks, B., & Ford, C. (2022). The self-directed learning readiness of access to the students at City College Plymouth, United Kingdom. *Journal of Adult and Continuing Education*, 28(2), 449–462.
- Meesuk, P., Wongrugsu, A., & Wangkaewhiran, T. (2021). Sustainable teacher PD through professional learning community: PLC. *Journal of Teacher Education for Sustainability*, 23(2), 30–44. <https://doi.org/10.2478/jtes-2021-0015>
- Merik, T., & Edmonson, S. L. (2021). *Financial Expenditures by Function for Texas Public Schools: A Multiyear Statewide Investigation* (Doctoral dissertation, Sam Houston State University).
- Mezirow, J. (2018). Transformative learning theory. *In contemporary theories of learning* (pp. 114-128). Routledge.
- Mohamed, Z. (2022). Contending with the unforeseen “messiness” of the qualitative data analysis process. *Waikato Journal of Education* (2382-0373), 27(2), 85–90. <https://doi.org/10.15663/wje.v27i2.945>

- Moore, S., & Bovill, R. (2022). Click here for transformation: Examining a course for graduate teaching assistants around technology-enhanced learning through the lens of Mezirow's transformative learning theory. In *Transformative Learning Theory and Praxis* (pp. 156-171). Routledge.
- Morris, T. H. (2019). Self-directed learning: A fundamental competence in a rapidly changing world. *Int Rev Educ* 65, 633–653 (2019).
<https://doi.org/10.1007/s11159-019-09793-2>
- Mushtaque, I., Rizwan, M., Dasti, R. K., Ahmad, R., & Mushtaq, M. (2021). Students' attitude and impact of online learning; role of teachers and classmate support during the Covid-19 crisis. *Performance Improvement*, 60(5), 20-27.
- Mustafa, B., & Paçarizi, Y. (2021). Exploring teachers' perceptions of PD: The case of Kosova. *Journal of Language and Linguistic Studies*, 17(3), 1210-1224.
<https://search.informit.org/doi/abs/10.3316/informit.221521727725058>
- Myers, J. S., & Wong, B. M. (2019). Measuring outcomes in quality improvement education: success is in the eye of the beholder. *BMJ Quality & Safety*, 28(5), 345-348.
- Naah, A. M. (2020). Pre-service teachers' perception of online teaching and learning during the COVID–19 era. *International Journal of Scientific Research and Management*, 8(10), 1649-1662.
- Nambiar, D. (2020). The impact of online learning during COVID-19: students' and teachers' perspective. *The International Journal of Indian Psychology*, 8(2), 783-793.

- Nawab, A., & Bissaker, K. (2021). Contextual factors influencing the effectiveness of PD for teachers in rural Pakistan. *Teacher Development*, 25(5), 706–727.
<https://doi.org/10.1080/13664530.2021.1974080>.
- Nawawi, M. (2018). Investigating Purpose and Impact of PD in response to shifting curriculum. *International Journal of Social Sciences & Educational Studies*, 5(2), 86–97. <https://doi.org/10.23918/ijsses.v5i2p86>
- Nolan, K. (2018). The lived experience of market-based school reform: An ethnographic portrait of teachers' policy enactments in an urban school. *Educational Policy*, 32(6), 797-822.
- Odour, M. (2016). Massive WASSCE exam failure in Liberia and Ghana. *African News*.
en. <https://www.africanews.com/programmes/news/>
- Oducado, R. M. (2020). Faculty perception toward online education in a state college in the Philippines during the coronavirus disease 19 (COVID-19) pandemic. *Universal Journal of Educational Research*, 8(10), 4736-4742.
- O’Kane, P., Smith, A., & Lerman, M. P. (2021). Building transparency and trustworthiness in inductive research through computer-aided qualitative data analysis software. *Organizational Research Methods*, 24(1), 104–139.
- Ong, C. C. P., Foo, Y. Y., Chiu, F. Y., & Nestel, D. (2022). “It’s going to change the way we train”: Qualitative evaluation of a transformative faculty development workshop. *Perspectives on Medical Education*, 11(2), 86–92.
<https://doi.org/10.1007/s40037-021-00687-4>

- Ozone, S., Haruta, J., Takayashiki, A., Maeno, T., & Maeno, T. (2023). Three-year evaluation of a program teaching social determinants of health in community-based medical education: a general inductive approach for qualitative data analysis. *BMC Medical Education*, *23*(1), 1–9. <https://doi.org/10.1186/s12909-023-04320-2>
- Özüdoğru, F. (2022). Investigating the effect of differentiated instruction on academic achievement and self-directed learning readiness in an online teaching profession course. *I.e.: Inquiry in Education*, *14*(2), 1–28.
- Palmer, K., & Noltemeyer, A. (2019). PD in schools: predictors of effectiveness and implications for statewide PBIS trainings. *Teacher Development*, *23*(5), 511–528. <https://doi.org/10.1080/13664530.2019.1660211>
- Palmer, K., & Noltemeyer, A. (2019). PD in schools: Predictors of effectiveness and implications for statewide PBIS trainings. *Teacher Development*, *23*(5), 511-528.
- Park, J. M., Seo, H.-J., Kim, S. M., Kang, H., & Lee, S. J. (2023). Association between COVID-19-related stress and self-directed learning ability among Korean nursing students. *Nurse Education in Practice*, *69*. <https://doi.org/10.1016/j.nepr.2023.103613>
- Peng, Y., Wang, Y., & Hu, J. (2023). Examining ICT attitudes, use and support in blended learning settings for students' reading performance: Approaches of artificial intelligence and multilevel model. *Computers & Education*, *203*. <https://doi.org/10.1016/j.compedu.2023.104846>

- Perry, S. A. B. (2021). Participatory feeling: re-visioning transformative learning theory through heron's whole person perspective. *Adult Education Quarterly*, 71(4), 338–355. <https://doi.org/10.1177/07417136211016779>
- Powell, C. G., & Bodur, Y. (2019). Teachers' perceptions of an online professional development experience: Implications for a design and implementation framework. *Teaching and Teacher Education*, 77, 19-30.
- Power, J. R., & Sorby, S. A. (2020). Spatial development program for middle school: teacher perceptions of effectiveness. In *Grantee Submission*. Grantee Submission.
- Prandini, M., & Bacongus, R. D. T. (2020). Changing lives: Transformative learning and financial attitudes of Filipino women migrants in Italy, *Studies in the Education of Adults*, 53:1, 61-81, DOI: [10.1080/02660830.2020.1813956](https://doi.org/10.1080/02660830.2020.1813956)
- Ravitch, S., & Carl, M. (2019). *Qualitative Research, 2nd Edition*. SAGE Publications, Inc., 20191220.
- Richter, E., Fütterer, T., Meyer, A., Eisenkraft, A., & Fischer, C. (2022). Teacher collaboration and professional learning: examining PD during a national education reform. *Zeitschrift Für Pädagogik*, 68(6), 798–819.
- Roberts, R. E. (2020). Qualitative interview questions: Guidance for novice researchers. *Qualitative Report*, 25(9).
- Robinson, R. P., & Bell, J. (2023). Dreaming beyond education policy: a BlackCrit analysis of ESEA and ESSA. *Journal for Multicultural Education*, (ahead-of-print).

- Ryan, C. L., Cant, R., McAllister, M. M., Vanderburg, R., & Batty, C. (2022). Transformative learning theory applications in health professional and nursing education: An umbrella review. *Nurse Education Today*, 119. <https://doi.org/10.1016/j.nedt.2022.105604>
- Saleem, A. (2020). Effectiveness of continuous PD to improve teaching: evidence-based on systematic review. *Palarch's Journal of Archaeology of Egypt/Egyptology*. <https://www.archives.palarch.nl/index.php/jae/article/view/3594>
- Saleem, A., Gul, R., & Dogar, A. A. (2021). Effectiveness of continuous PD program as perceived by primary level teachers. *Ilkogretim Online*, 20(3), 53–72. <https://doi.org/10.17051/ilkonline.2021.03.06>
- Saultz, A., Lyons, A. I., Aronson, B., Sander, S. A., & Malin, J. R. (2021). Understanding Preservice Teacher Dispositions. *Teacher Education Quarterly*, 48(1), 7-32.
- Schnepfleitner, F. M., & Ferreira, M. P. (2021). Transformative Learning Theory—Is It Time to Add A Fourth Core Element?. *Journal of Educational Studies and Multidisciplinary Approaches*, 1(1), 40-49.
- Schwab, J. E., Murowchick, E., Yaure, R. G., & Cruz, L. (2021). Observation, practice, and purpose: Recalibrating curriculum to enhance PD. *New Directions for Teaching & Learning*, 2021(168), 59–68. <https://doi.org/10.1002/tl.20468>
- Şentürk, C. (2021). Effects of the blended learning model on preservice teachers' academic achievements and twenty-first century skills. *Education and Information Technologies*, 26(1), 35-48.

- Shaik, N. (2023). Transforming teaching and learning in early childhood care and education during COVID-19 in a poor community of the Cape Flats, South Africa. *Early Childhood Education Journal*, 51(5), 791–800.
<https://doi.org/10.1007/s10643-022-01329-y>
- Shafeeqe, V. (2020). Rethinking pedagogy: An outcome-based approach to political science. *Higher Education for the Future*, 7(1), 45-53.
- Sherif, V. (2018). Evaluating preexisting qualitative research data for secondary analysis. *Forum: Qualitative Social Research*, 19(2), 26–42.
- Sherman, M. B. (2022). Education in Liberia. In *Education in Africa* (pp. 162-187). Routledge.
- Skinner, A., Flannery, K., Nocka, K., Bor, J., Dean, L. T., Jay, J., Lipson, S. K., Cole, M. B., Benfer, E. A., & Raifman, J. (2022). A database of US state policies to mitigate COVID-19 and its economic consequences. *BMC public health*, 22(1), 1124.
- Smith, J. M. (2018). Challenges and opportunities of PD in teacher education at a South African University in a pre- and post-democratic Era. *BCES Conference Proceedings*, 16, 92–98.
- Spoon, D. F. (2018). *Perceptions of beginning teachers and mentor teachers: A case study of a campus mentor program*. Texas A&M University-Commerce.
<https://www.proquest.com/openview/e6e4456c65ce6c0423d46c77176f824d/1?pq-origsite=gscholar&cbl=18750>

- Stapley, E., O’Keeffe, S., & Midgley, N. (2022). Developing typologies in qualitative research: The use of ideal-type analysis. *International Journal of Qualitative Methods*, 21, 16094069221100633.
- Stebick, D., Hart, J., Glick, L., Kindervatter, J., Nagel, J., & Patrick, C. (2023). Teacher inquiry: A catalyst for PD. *Networks: An Online Journal for Teacher Research*, 24(1), 1–26. <https://doi.org/10.4148/2470-6353.1350>
- Taylor, E. W. (2017). Critical reflection and transformative learning: A critical review. *PAACE Journal of Lifelong Learning*, 26(2), 77-95.
- Terry, N. (2022). Multicultural education and the ESEA: the ebbs and flows of policy alignment between 1965-2015. *Multicultural Education Review*, 14(4), 211-227.
- Thomas, G. (2017). *How to do your research project. A guide for students (3rd ed.)*
Thousand Oaks, CA: Sage
- Trainor, L. R., & Bundon, A. (2021). Developing the craft: Reflexive accounts of doing reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health*, 13(5), 705-726.
- Truss, A., & Anderson, V. (2023). The navigational challenges of a blended learning approach to teaching in business and management. *The International Journal of Management Education*, 21(1). <https://doi.org/10.1016/j.ijme.2022.100733>
- Tyagi, C. H. A. N. C. H. A. L., & Mishra, P. K. (2019). Teacher educators’ perceptions about continuing PD. *Journal of Indian Education*, 45(2), 80-90.
- UNESCO. (2022). *Education sector analysis: Republic of Liberia*.
<https://unesdoc.unesco.org/ark:/48223/pf0000383314>. pdf

- UNESCO-CFIT. (2019). *Liberia national policy for ICT in education, 2019.pdf*
- Unnanantn, T. (2022). Enhancing the English communication assessment ability of preservice teachers using the transformative learning concept: Systematized instruction for professional teacher development. *International Journal of Assessment & Evaluation*, 29(1), 89–103. <https://doi.org/10.18848/2327-7920/CGP/v29i01/89-103>
- van der Walt, J. L. (2019). The term “Self-Directed Learning”—back to Knowles, or another way to forge ahead? *Journal of Research on Christian Education*, 28(1), 1–20. <https://doi.org/10.1080/10656219.2019.1593265>
- Van Deur, P. (2021). Middle school teachers’ views on developing self-directed learning. *Educational Studies*, 47(6), 647–660. <https://doi.org/10.1080/03055698.2020.1729093>
- van Woezik, T. E. T., Koksma, J. J.-J., Reuzel, R. P. B., Jaarsma, D. C., & van der Wilt, G. J. (2021). There is more than “I” in self-directed learning: An exploration of self-directed learning in teams of undergraduate students. *Medical Teacher*, 43(5), 590–598. <https://doi.org/10.1080/0142159X.2021.1885637>
- Verma, M. G., & Priyamvada, M. (2020). COVID-19 and teaching: Perception of school teachers on usage of online teaching tools. *Mukt Shabd Journal*, 9(IV), 2492-2503.
- Vipler, B., Snyder, B., McCall-Hosenfeld, J., Haidet, P., Peyrot, M., & Stuckey, H. (2022). Transformative learning of medical trainees during the COVID-19

pandemic: A mixed methods study. *PLoS ONE*, 17(9).

<https://doi.org/10.1371/journal.pone.0274683>

- Wang, V., Torrisi-Steele, G., & Reinsfield, E. (2021). Transformative learning, epistemology and technology in adult education. *Journal of Adult and Continuing Education*, 27(2), 324-340
- Widodo, W., Gustari, I., & Chandrawaty, C. (2022). Adversity quotient promotes teachers' professional competence more strongly than emotional intelligence: Evidence from Indonesia. *Journal of Intelligence*, 10(3), 44.
- Wynants, S., & Dennis, J. (2018). Professional development in an online context: Opportunities and challenges from the voices of college faculty. *Journal of Educators Online*, 15(1), n1.
- Xie, J., & Rice, M. F. (2021). Professional and social investment in universal design for learning in higher education: Insights from a faculty development programme. *Journal of Further and Higher Education*, 45(7), 886-900.
- Xiong, W., Yang, J., & Shen, W. (2022). Higher education reform in China: A comprehensive review of policymaking, implementation, and outcomes since 1978. *China Economic Review*, 72, 101752.
- Yeong, M. L., Ismail, R., Ismail, N. H., & Hamzah, M. I. (2018). Interview protocol refinement: Fine-tuning qualitative research interview questions for multi-racial populations in Malaysia. *The Qualitative Report*, 23(11), 2700-2713.
- Yin, R. K. (2018). *Case study research: Design and methods (6th ed.)*. Thousand Oaks, CA: SAGE.

- Young, D. S., & Casey, E. A. (2018). An examination of the sufficiency of small qualitative samples. *Social Work Research*.
- Yuliarty, P. (2021). Construction service project scheduling analysis using critical path method (CPM), project evaluation and review technique (PERT). *work*, 10, F1.
- Zalmon, I. G., & Wonu, N. (2017). Comparative analysis of student mathematics achievement in West African senior secondary certificate examination in Nigeria. *European Journal of Research and Reflection in Educational Sciences* 5(1). ISSN 2056-5852
- Zhao, L., & Fan, W. (2023). Conception, Features, and Framework of Curriculum and Instruction Integration. *Education Research International*, 2023.
- Zhu, M., & Kadirova, D. (2022). Self-directed learners' perceptions and experiences of learning computer science through MIT open courseware. *Open Learning*, 37(4), 370–385. <https://doi.org/10.1080/02680513.2020.1781606>

Appendix A: The Project

Policy Recommendation Proposal for Pathways to Reform USD PD

Introduction

The reason for proposing this policy recommendation project, “Pathways to Reform the USD PD” is a result of a study to understand why the existing PD launched to improve poor student test scores at an urban school district (USD) was not yielding the expected results. Data on the perceptions of eight USD secondary school teachers were collected and analyzed to have an insight into the strength and weakness of the PD. The findings from the study showed that there was a need for a pathway to reform the existing PD to contain elements of research-based adult learning practices and skills in applying 21st century learning approaches. The key goal of the policy proposal recommendation project is to generate a position statement which the USD will use to develop a policy to improve the existing PD.

This policy recommendation proposal is developed with several intentions. It is intended to clarify roles and responsibilities of stakeholders, lay out a roadmap of concrete actions to achieve goals and priorities, set specific targets and outputs, set main goals and priorities Identify resources required, suggest timelines for implementation, stay in line with MOE policy regulations, show the school district and government of Liberia’s commitment, sets, and be applied sector-wide in Liberia.

The policy will focus on a mandate for all teachers in the district to attend proposed PD workshops and training to accrue 47 PD credit hours. The hours will ensure upward movements along the USD teaching career ladders. In addition, teachers who

accrue the 47 hours will be prioritized for access to available USD opportunities. In summary, to be an effective policy, efforts should be applied to ensure this policy is built on evidence, politically feasible, financially realistic, and agreed to by the government and relevant stakeholder,

The Problem

The problem that this project is designed to solve is the situation of the present deficient PD program at the USD that is not meeting expectation. The PD was designed to improve teachers' teaching skills so that the consistent districtwide low student test scores could improve. Unfortunately, the expectation was not met. To understand why this was happening, a study on the perceptions of secondary school teachers within the USD was conducted to identify gaps or weakness and strength of the PD. Findings from the study showed that the PD required reform from conventional teacher training practices to non-conventional. This project Pathways to Reform the USD PD is designed as the deliverable of the study and a pathway to towards the proposed reform of the efficient PD.

Existing Policy

Due to the constant deficient performance of USD students on regional examinations and school-based benchmark tests, the Ministry of Education of Liberia launched several interventions and policies including the Education Sector Plan (ESP), the Getting to Best (GTB), ICT Pedagogy Curriculum, and the competence-based curriculum. To guarantee successes of the various plans, the MOE mandated that all school districts enforce teachers' professional development. Despite the interventions and

mandates, low student tests scores remained constant from Y2013 to Y2021. Presently, there is no means by which the efficacy of the PD can be measured besides students test scores. Firstly, there are no means to determine whether teachers are attending the PD two times a year as required. Secondly, there is no documented evidence of training of trainers (TOT) for facilitators of the PD. Lastly, modules to track PD content delivery are not available at the districts; thus, facilitators are responsible to develop content from the internet or other sources based on the topics assigned them to deliver.

Policy Segments

Policy Statement

Due to the situation at the USD where the existing PD is not meeting expectation, and the understanding revealed by the findings from the study, the “Pathways to Reform the USD PD” will be based on a new policy statement that will be aligned to its reform goals. This policy statement contains specific language that articulates the policy using formal language consistent with the language used by the Ministry of Education of Liberia and the existing PD at USD. It will strengthen the existing district policies regarding staff development and professional development programs. The policy statement recommends additional inputs required to reform the existing PD from conventional learning practices to non-conventional learning practices. The statement recommends how the district can proceed with the reform process and recommends commitments of the USD and stakeholders. The suggested policy statement reads:

The policy recommendations contained herein outline the procedure for adopting more refined strategies as a pathway to reform the existing PD. The USD is

committed to improving student tests scores by improving teachers' effectiveness based on research-based best practices, student achievement, and professional learning. The USD is responsible for creating and maintaining appropriate systems to oversee the facilitation of the PD. The USD is responsible for clarifying the program development process to ensure stakeholders equitable opportunities to make recommendations based on perceived and assessed needs. The USD accepts responsibility for reviewing submitted program proposals in a reasonable period. This statement provides an overview of the district's position towards new innovative programs to reform the existing PD, and that can be used to guide decision-making throughout the program proposal process. To those ends the USD is presenting a PD implementation framework as the pathway to transform the existing PD from conventional to non-conventional.

Policy Goals

The purpose of professional development is to help professionals learn and apply new skills and knowledge that can help them in their job and advance their career (Havea & Mohanty, 2020). The following goals of this policy recommendation are based on the policy position statement:

1. To put in writing what the USD will do to reform the existing PD to improve student test scores.
2. To suggest a set of steps and activities as a roadmap to reform the existing deficient PD program.

3. To create and maintain appropriate systems to oversee the facilitation of the USD PD.

Policy Proposal Project Components

The problem to be addressed is the situation of the present deficient PD program at the USD that is not meeting expectations. This problem needs to be addressed by improving teachers skills so that student test scores can improve.

Feasibility

Needs Assessment

A needs assessment will be conducted to identify specific needs that exist among the teachers. While findings showed the existing PD requires reform to adequately prepare teachers and attendance would be mandatory, delivery of the contents of the modules will not be on a one-size-fits all basis. Therefore, the goal of the needs assessment will be to acquire an understanding of the specific supports for each participant teacher. A needs assessment template will be developed to collect data on areas where teachers believe they need further training. Teachers will fill out assessment forms and return them for analysis. The analysis will indicate whether needs are significant enough for lesser or greater interventions as specific case in point.

Existing support

The existing support is the districtwide mandate that teachers at all grade levels are required to attend two school-based PD classes each academic year. This existing support will ensure teachers attend the reformed PD, when modified in this proposal and adopted by the district leaders. The availability of spaces within the USD to conduct

workshops is another existing support that would enhance the implementation of the proposal. The district education office (DEO) has training rooms that are used for PD sessions and meetings. The two high schools within the district have auditoriums but are offered to utilize the education office training rooms at no cost.

Potential barriers and needs

To identify potential barriers, three fundamental questions were asked at the conception stage. The responses to those questions will indicate barriers that would influence decisions to be made on priorities, trade-offs, and phasing of activities. The questions are as follows::

1. Are there sufficient institutional capacity and human resources to implement the policy?
2. Are the management structures appropriate?
3. Are there sufficient financial resources to enable achievement of the policy goal

There are three key barriers that could impede the implementation of this proposal. The first barrier is the gap in capacity demonstrated by PD facilitators. Findings from the study showed that facilitators do not possess adequate capacity to apply research-based adult learning strategies including self-directed learning (SDL), simulation-based learning (SBL), and critical reflection (CR) which are components of conceptual framework transformational learning theory (TLT) that grounds this study. Additionally, facilitators showed a lack of capacity to train teachers to utilize universal design for learning (UDL), a modern pedagogical approach. The second potential barrier is the low facilitators retention rate. The district presently has funding to only PD facilitators

transportation allowance only, but not salaries. This has caused some facilitators to show reluctance to continue while others have left the district for better opportunities.

The third potential barrier is limited access to technology. Limited access to internet communication technology (ICT) and electric power supply would be a barrier to reforming the PD from conventional to non-conventional learning approach. Electric power supply is not constant in Liberia due to the infrastructural destruction during the 14-year civil war. The existing PD policies do not delegate specific roles and responsibilities to USD leaders and do not specify the criteria for stakeholders and facilitators. This situation resulted in gaps in the operation of the PD program and poor outcomes.

Solutions to Potential Barriers

Resources Needed

The policy recommendation proposal will explain the expectations from all participants and stakeholders to address the potential barrier situations. The key solution to the potential barriers is to divide the implementation of the proposal into achievable goals and steps. USD would have to develop a budget to pay salaries to PD to improve the retention rate. Special sessions will be held at the beginning of each year to refine facilitators application of transformational learning strategies to the PD sessions. Power generators, presentation projectors, and other ICT and instructional materials would have to be procured to improve access to technology. The issue of stakeholders in the PD will be addressed by a policy statement that contains criteria that define roles and responsibilities of relevant stakeholders.

Objectives and Outputs

Objectives are the desired benefits such as intents to improve teachers skills and expected increase in student test scores. Outputs are the deliverables indicated by increase in the rate of teachers' completion PD tiers, rate of retention facilitators' retention and facilitators' demonstrated application of UDL, and transformational learning approaches to conduct PD workshops. The outcomes of the policy recommendation project will be the results of the social change situation generated by the project or the services it rendered. The social change from the project outcomes can include changes in perceptions, changes in policies, changes in communities, changes in behavior, changes in conditions, and changes in attitudes. (Myers & Wong, 2019; Guo et al., 2020). Appendix B, C and D represents the detailed implementation plan of the policy recommendation.

Program Details

The structure of the PD policy recommendation project will be divided into representation of the PD tiers, project activities, timeline, and representation of PD credits to be accrued by USD teachers who attend the mandatory PD.

Structure of the Recommended PD Program

This section is a description of the contents of the PD sessions. The contents are divided into bigger sections referred to as components which are further divided into modules. Each module has units or topics that teachers are required to demonstrate mastery and completion. The units are integrated with 21st century learning strategies which are the focus of the project.

Professional Development Tiers

| Component | Tiers/Modules | Units |
|---------------|--|--|
| 1. FOUNDATION | FO1.1 Philosophy of Education | <u>Application of TL & UDL approaches</u> 1. Liberian Education Philosophy 2. Ministry of Education Policies & Issues |
| | FO1.2 Professional Behavior and Ethics | <u>Application of TL & UDL approaches</u> 1. Professional Ethics 2. Code of Conduct for Teachers and School Administrators 3. Professional Development: Lifelong Learning |
| | FO1.3 Issues in Education | <u>Application of TL & UDL approaches</u> 1. Gender Equity and Equal Access to <div style="text-align: center;">Education</div> 2. Economic and Rural Barriers to Education |
| Component | Tiers/Modules | Units |
| 2. CONTENT | CO2.1 English & Literature | <u>Application of TL & UDL approaches</u> 1. Building Vocabulary 2. Comprehension 3. Literal Comprehension – Main Idea 4. Literal Compression – Specific Details |
| | CO2.2 Mathematics | <u>Application of TL & UDL approaches</u> 1. Application of UDL approach 2. Basic of Algebra 3. Fundamentals of Geometry 4. Fundamentals of Trigonometry |
| | CO2.3 Science | <u>Application of TL & UDL approaches</u> 1. Basic Biology |

| | | |
|------------------|---|---|
| | | <p>2. Basic Chemistry</p> <p>3. Basic physics</p> <p>4. General science</p> |
| Component | Tiers/Modules | Units |
| 3. PEDAGOGY | PE3.1 Teaching Methods and Instructional Aids | <p><u>Application of TL & UDL approaches</u></p> <p>1. Strategies for Teaching Young Learners</p> <p>2. The Stages of a Lesson for Participatory Learning</p> <p>3. Strategies for Effective Learner-Centered Teaching</p> <p>4. Lesson Planning: Participatory Learning</p> |
| | PE3.2 Testing and Evaluation | <p><u>Application of TL & UDL approaches</u></p> <p>1. Testing and Evaluation Terminology</p> <p>2. Twelve Kinds of Tests</p> <p>3. Analyzing Test Items</p> <p>4. Differentiating between Formative and Summative Evaluation</p> |
| | PE3.3 Classroom Management | <p><u>Application of TL & UDL approaches</u></p> <p>1. Perceptual Styles</p> <p>2. Differentiated Instruction</p> <p>3. Preventing Behavior Problems</p> <p>4. Techniques for Responding to Problems</p> |
| | PE3.4 Instructional Planning | <p><u>Application of TL & UDL approaches</u></p> <p>1. Understanding the Curriculum</p> <p>2. Medium Term Planning</p> <p>3. Writing Lesson Objectives and Lesson Planning</p> <p>4. Chalkboard Ethics</p> |
| | PE3.5 ICT-Pedagogy | <p><u>Application of Non-Conventional Approaches</u></p> <p>1. Introduction to non-conventional pedagogy</p> <p>2. Computer Basics</p> <p>3. Social Media Classroom Benefits</p> |

| Component | Tiers/Modules | Units |
|-----------------------|--|---|
| 4. TEACHING PRACTICES | 4.1 Teaching, Observation and Reflection | 4. Introduction to MS PowerPoint 1. Elements of Effective Instruction 2. Understanding Grading and Assessment 3. Feedback and Reinforcement 4. Reflective Teaching 5. Learning to Learn Strategies 6. The ABC's of Coaching & Mentoring 7. Observation as a Guide to Best Practices 8. Journaling as a Self-study Process |

Project Activities

The project activities are the actual implementation of the program. This section details the activities that will lead to the full implementation of the project.

Activity # 1 Position Statement Presentation Meeting

| | |
|--|--|
| Objectives | To present the policy position statement; To recommend a pathway to the reform of the existing deficient PD program at USD; To convincingly articulate to the district leaders of the importance and to accept it |
| Activity | Policy position statement meeting with school district leaders |
| Description and implementation strategy | <p>This will be a meeting with the district leaders to present the position statement to the district leaders. Discussion over the merits and demerits of the policy proposal will be held.</p> <p>Conclusions will be reached at future meetings or action steps for mobilizing resources and consensus from other stakeholders for</p> |

| | |
|---------------------------------|--|
| | the implementation of the project. Roles and responsibilities as spelled out by the proposal will be scrutinized and discussed for concurrence. |
| Lead/Responsible persons | Researcher |
| Participants | Researcher, project team members, district leaders, district PD coordinator; teacher representatives or principals |
| Inputs | Projector; note pads; facilitators remuneration including transportation; assorted relevant stationery supplies; electric power supply; presentation PowerPoints, and lunches. |

Activity # 2 Facilitators preparation workshops

| | |
|--|---|
| Objectives | To improve the capacity of PD facilitators To make facilitators accustomed to their roles and responsibilities |
| Activity | Facilitators preparation workshop |
| Description and implementation strategy | This will be a training of trainers (TOT) session for facilitators. PD facilitators will attend a 2-day workshop to review all PD modules, contents, and materials that they are responsible for delivering each semester. Training in adult learning facilitation will be key. This will include how to apply self-directed learning (SDL), simulation-based-learning (SBL), critical reflection (CR), ICT pedagogy and non-conventional pedagogy strategies |

| | |
|--------------------------------|--|
| Lead/Responsible person | The district professional development office will conduct this level of training of trainers |
| Participants | Facilitators recruited from outside the district (external) and veteran district teachers (internal) who have experience in facilitating adult learning; staff designated by the District PD Coordinator to conduct the TOT. |
| Inputs | Handouts: -Knowles andragogy theory and Mezirow's transformational learning theory -Adult learning strategies: SDL, SBL, CR, UDL, ICT pedagogy; coaching and mentoring strategies; Projector; note pads; facilitators remuneration including transportation; assorted relevant stationery supplies; electric power supply and lunches. |

Activity # 3 Training of Trainers Workshop Implementation

| | |
|--|---|
| Objectives | To improve the capacity of PD facilitators To make facilitators accustomed to their roles and responsibilities |
| Activity | Facilitators preparation workshop |
| Description and implementation strategy | This will be a training of trainers (TOT) session for facilitators. PD facilitators will attend a 2-day workshop to review all PD modules, contents, and materials that will be responsible for delivering each semester. Training in adult learning facilitation |

| | |
|--------------------------------|--|
| | will be key. This will include how to apply self-directed learning (SDL), simulation-based-learning (SBL), critical reflection (CR), ICT pedagogy and non-conventional pedagogy strategies |
| Lead/Responsible person | The district professional development office will conduct this level of training of trainers |
| Participants | Facilitators recruited from outside the district (external) and veteran district teachers (internal) who have experience in facilitating adult learning; staff designated by the District PD Coordinator to conduct the TOT. |
| Inputs | Handouts: <ul style="list-style-type: none"> -Knowles andragogy theory and Mezirow's transformational learning theory -Adult learning strategies: SDL, SBL, CR, UDL, ICT pedagogy; coaching and mentoring strategies; Projector; note pads; facilitators remuneration including transportation; assorted relevant stationery supplies; electric power supply and lunches. |

Activity # 4 Teachers' Mandatory PD Completion

| | |
|-------------------|--|
| Objectives | To improve USD teachers capacity in pedagogy and pedagogical content To create quality teachers |
| Activity | Mandatory teachers professional development training. |

| | |
|---|--|
| <p>Description and implementation strategy</p> | <p>All teachers will be required to attend PD workshops and complete 4 components containing Foundation, Content, Pedagogy and Teaching Practices. There will be 18 modules consisting of 47 units.</p> <p>All teachers will be required to complete the 18 modules within two years. The modules and units will be distributed over the semesters. This means each workshop content will contain units from each of the modules instead of having a single module unit delivered within semester. The selection of units will depend on results from the needs assessment that will be conducted before the project begins.</p> <p>The PD workshops will be conducted three times in an academic year. The timeline will be at the beginning of the year, in the middle of the year and at the end of the year. The workshops will be held on Saturdays or holidays that are not so significant. Each teacher will submit a schedule that suits their attendance to enable the district to plan the sessions, recruit facilitators and mobilize resources.</p> <p>The districts professional development department shall be responsible for organizing all workshops and ensuring proper</p> |
|---|--|

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|--------------------------------|--|
| | <p>records of teachers and facilitators are submitted to the district quality assurance and human resource officers.</p> <p>When a teacher completes a component, they shall receive an exit slip signed by the facilitator and approved by the PD office. Exit slips will be given only for completion of modules and not units.</p> <p>Completion of units will be indicated by the facilitator filling out a human resource form, signed and stamped.</p> |
| Lead/Responsible person | District PD coordinator and PD facilitators |
| Participants | Secondary school teachers employed at USD |
| Inputs | <p>Handouts:</p> <p>Foundation, Content, Pedagogy and Teaching Practices.</p> <p>-Knowles andragogy theory and Mezirow's transformational learning theory</p> <p>-Adult learning strategies: SDL, SBL, CR, UDL, ICT pedagogy; coaching and mentoring strategies; Projector; note pads; facilitators remuneration including transportation; assorted relevant stationery supplies; electric power supply and lunches.</p> |

Representation of Required PD Credits

The required credit table represents the number of components teachers are required to complete. Each teacher is expected to accrue 47 units spread across the program over a maximum of two years.

| Components | Total no. of modules per component | Total no. of units per component | Units required to complete at beginning of school year | Units required to complete middle of school year | Units required to complete at end of school year |
|-------------------|------------------------------------|----------------------------------|--|--|--|
| Foundation | 3 modules | 7 | 3 units | 3 units | 1 unit |
| Content | 5 modules | 12 | 5 units | 5 units | 2 units |
| Pedagogy | 7 modules | 20 | 7 units | 7 units | 6 units |
| Teaching Practice | 3 modules | 8 | 4 units | 3 units | 1 unit |
| Total | 18 | 47 | 19 | 18 | 10 |

Evaluation: The concluding section will explain how the project will be monitored and assessed each semester as the activities are implemented. This will be a framework with indicators and a timeline to determine the successes or challenges.

Timeline: An implementation timeline will be developed to indicate how long and in what stages each activity will occur, at what point should outs and outcomes expected to appear, and how long the program will run.

Expected Outcomes

This is what the proposal hopes to achieve. This will be measured by the overall results of the actions taken in the segments, and tiers actions. This will be measured by

indicators such as strength of the USD PD, improvement in teachers and facilitators' capacity, and improvement student test scores over each academic year.

Roles and Responsibilities of Stakeholders

This section contains descriptions of the delegated roles of each group of stakeholders that are expected to participate in the implementation of the policy recommendation and the reform. By approving and adopting the policy proposal. This document will help them understand the relationship between the study and the project.

Role of Stakeholders

| # | Stakeholder | Roles & Responsibilities |
|---|-------------|---|
| 1 | Researcher | Submit an executive summary of the findings of the study to the district leaders. |
| | | Submit and defend policy position statement proposal |
| 2 | USD leaders | Receive the policy position statement and forward it to the appropriate government agency for approval. |
| | | Mobilize resources to implement the reformed PD project |
| | | Supervise the operations of the policy proposal project |
| | | Conduct periodic assessment of teachers by analyzing student performance. |

| | | |
|---|--------------|---|
| | | Articulate the outcomes to the Ministry of Education. |
| | | Evaluate the PD project to determine the successes and challenges of the project. |
| | | Conduct training of trainers for facilitators who will conduct training for the teachers. |
| 3 | Facilitators | Conduct PD workshops |
| | | Submit formative and summative assessment of teachers |
| 4 | Teachers | Attend all PD workshops and complete all the components and modules of the program. |
| | | Ensure completion records are submitted to USD PD |
| | | Attend all PD workshops and complete all the components and modules of the program. |
| 5 | Students | submit teacher evaluation forms |

This section will help USD leaders understand the relationship between the study and the project and their respective roles or responsibilities. The researcher's role is to submit an executive summary of the findings of the study to the district leaders. The

responsibility of the USD leaders is to receive the policy statement and forward it to the appropriate government agency for approval. Their additional role is to pool funding support for support to implement the project. PD supervisors are responsible to conduct periodic assessment of teachers by analyzing student performance. The district leaders will be responsible for administering the policy proposal project and mobilizing resources for the implementation of the PD workshops. USD leaders are responsible to conduct training of trainers for facilitators who will conduct training for the teachers. They are responsible to evaluate the PD project to determine the successes and challenges of the project. Facilitators are responsible to submit formative and summative assessment information of all workshop participants to the USD PD coordinator. Teachers are responsible to attend all PD workshops and complete all the components and modules of the program. Students are responsible to submit teacher evaluation forms after every period. The forms are designed to record students' perceptions of their teachers efficacy including their application of non-conventional teaching strategies.

Project Implementation Steps

While the proposal recommends eight steps to be followed to implement the project, the district can add other steps or skip some steps, where necessary. The project

Implementation steps are as follows:

1. The policy will be implemented as a reform pathway to the existing PD program.
2. The Ministry of Education of Liberia or donor partners will have to make fundings and instructional materials available to the district leaders

3. Teachers will be required to attend the PD and complete in cohorts over two years. Teachers who do not complete a specific module will be required to repeat until they complete it.
4. Orientation sessions explaining the policy to various district employees such as teachers and administrators will be conducted. These sessions could take place during professional development times or building faculty meetings.
5. Enrichment sessions and additional support for teachers and facilitators about specific portions of the process will be scheduled on an as needed basis.
6. All modules and tiers will eventually be required to establish evaluative activities and submit analyzed data for program continuation.
7. All aspects of the PD will be documented to determine the extent to which existing gaps are being narrowed or closed.
8. When the policy has been fully implemented, there will be positive social changes in the attributes of the district. Completed documentation of all aspects of the program cycle will be used to inform the policy components for continuous improvement and reform.

Project Implementation Plan

This project will be a mandatory professional development process that all teachers within the USD will be required to attend. The policy proposal will be implemented in stages by the school district officials and secondary school teachers. The academic year in Liberia is comprised of 10 months and instructional time is divide into two semesters, first and second. The first semester runs from September to January and the second, from February to July of each academic year.

For this policy proposal, each teacher will be required to attend three professional development sessions and demonstrate efficiency to be retained by the school district. The total credits required for retention will be 47. The credits can be obtained within one year by attending all the workshops in each or within two years. Teachers who do not complete the 47 credits within two years will not be retained as teachers in the district. The PD workshops will be conducted during times that schools are not in session including after school hours, Saturdays or holidays that are not so significant. Each teacher would have to submit a schedule that suits their attendance to enable the district to plan the sessions, recruit facilitators and mobilize resources.

The district's professional development department shall be responsible for organizing all workshops and ensuring proper records of teachers and facilitators are submitted to the district quality assurance and human resource officers. When a teacher completes a component, they shall receive an exit slip signed by the facilitator and approved by the PD office. Exit slips will be given only for completion of modules and not units. Completion of units will be indicated by the facilitator filling out a HR form, signed and stamped. This project was developed to reform the PD for secondary school teachers; however, where the outcome is favorable, the format could be adopted and applied to the junior high and primary school levels in the district.

Policy Implementation Timeline

| Workshop # | Months | Activity | Participants |
|------------|--------------|--|------------------------------------|
| One | Aug. – Sept. | Training of trainers for PD facilitators | USD PD Coordinator Facilitators |

| | | | |
|---|--------------|--------------------------------|--|
| Two | Sept. – Nov. | Beginning-of year PD workshops | |
| Three | Dec. -Feb. | Mid-year PD workshop | |
| Four | Mar. – July | End-of-year PD workshops | |
| <p>Details: The academic year in Liberia is 10 months beginning from September and ending in July. The three required PDs will be conducted on days and dates determined by the USD within the divisions of the 10 months with minimum of no interference with instructional time</p> | | | |

Policy Evaluation

This section of the policy proposal details how the policy’s procedures can be evaluated over its two years of implementation. The two genres of evaluation that will be used to determine if the policy proposal is meeting expectation are formative evaluation and outcomes-based evaluation. The justification for selecting formative evaluation and outcomes-based evaluation is the complex structure of the policy proposal which has contains different segments, and PD tiers. The formative evaluation portion will provide progress reports and challenges on the completion of the various PD tiers so that PD leaders can make ready interventions. The outcomes portion will evaluate the total goals of the project by using the formative indicators to determine if teachers’ teaching capacities and student test scores have improved. Each of the three PD tiers of a segment is expected to be completed every three months of Liberia’s 10-month academic year.

Detailed Project Evaluation Framework. This USD leaders will utilize this comprehensive project evaluation framework USD to assess the outcomes of the policy recommendation proposal. When applied by the USD, it would assess the success, effectiveness, and overall performance of the project. It would also provide a structured approach to measure and analyze various aspects of the project. The table below represents the key elements of this project evaluation framework.

| # | Element | Description | Met | Unmet |
|---|----------------------------------|---|-----|-------|
| 1 | Project Objectives and Goals | Clearly defined objectives and goals that the project aimed to achieve | | |
| 2 | Scope and Deliverables | Documentation of the project's scope and a list of deliverables originally planned | | |
| 3 | Key Performance Indicators (KPI) | Quantifiable measures that indicate the project's success, such as cost performance, schedule adherence, quality metrics, etc | | |
| 4 | Project Timeline | Evaluation of the project's timeline, including planned vs. actual milestones and completion dates | | |

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|---|----------------------------------|---|--|--|
| 5 | Resource Utilization | Analysis of how project resources, including human resources, budget, and materials, were utilized throughout the project | | |
| 6 | Risk Management | Assessment of risk identification, mitigation strategies, and how unexpected issues were handled | | |
| 7 | Stakeholders Satisfaction | Feedback from project stakeholders, including clients, team members, and other relevant parties. | | |
| 8 | Budget and Financial Performance | Evaluation of the project's financial performance against the budget, including cost overruns or savings | | |
| 9 | Quality of Deliverables | Assessment of the quality of the final project deliverables compared to the established standards and requirements | | |

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|----|---|--|--|--|
| 10 | Communication Effectiveness | Evaluation of how effectively project information was communicated to team members, stakeholders, and other relevant parties | | |
| 11 | Lessons Learned | Documentation of lessons learned during the project, including what went well, what could be improved, and recommendations for future projects | | |
| 12 | Adherence to Regulations and Compliance | Evaluation of whether the project complied with relevant regulations, legal requirements, and industry standards | | |
| 13 | Sustainability and Environmental Impact | Assessment of the project's impact on the environment and its sustainability practices | | |
| 14 | Change Management | Examination of how changes to project scope were managed, including their impact on timeline, budget, and quality | | |

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|----|--|---|--|--|
| 15 | Post-Implementation Review | Assessment of how well the project results meet the intended objectives and if there are any post-implementation issues | | |
| | Documentation and Reporting | Adequate documentation of project activities, outcomes, and a comprehensive report summarizing the evaluation findings | | |
| 16 | Continuous Improvement Recommendations | Suggestions for improvements in project management processes and methodologies for future projects | | |
| 17 | Final Assessment | A summary of the overall success and effectiveness of the project based on the evaluation result | | |

Evaluation Frameworks

Two frameworks have been designed to assess the policy recommendation and the Pathways to Reform project proposal. Results from the project evaluation framework may be used as inputs to the overall policy evaluation.

Flexible Evaluation Framework. This framework is designed to evaluate the overall outcomes of the policy recommendation in a more concise version. USD leaders can include other headings that would present a more comprehensive evaluation data.

| Proposed Activity | Goal | Responsible Stakeholders | Timeline | Indicator |
|-----------------------------------|---|---------------------------------|---|---|
| Meet with USD leaders | To receive approval of the policy recommendation | Researcher & Research Team | As would be convenient | Signatures of district leaders obtained as approval to launch the policy recommendation |
| Train the teacher PD facilitators | To train PD facilitators on how to conduct adult learning, and refresh facilitators on their roles and responsibilities | District PD coordinator | Immediately upon approval and mobilization of resources | Available documented evidence that shows 1. all facilitators can demonstrate knowledge of how to conduct adult learning, and 2. |

| | | | | |
|--|--|--------------------------|---|---|
| | | | | Demonstrate awareness of their respective roles and responsibilities |
| Conduct teachers PD workshops | To orientate teachers on the application of non-conventional teaching strategies | District PD facilitators | Immediately upon completing facilitators training | Available documented evidence of percentage of teachers who demonstrated knowledge of how to apply non-conventional teaching strategies in their classrooms |
| Note: While the indicators will give insights of the success in the implementation of the policy recommendation project, student academic performance or test scores may also be considered as success of this policy recommendation project | | | | |

Detailed Project Evaluation Framework. This USD leaders will utilize this comprehensive project evaluation framework USD to assess the outcomes of the policy recommendation proposal. When applied by the USD, it would assess the success, effectiveness, and overall performance of the project. It would also provide a structured approach to measure and analyze various aspects of the project. The table below represents the key elements of this project evaluation framework.

| # | Element | Description | Met | Unmet |
|---|-----------------------------------|---|-----|-------|
| 1 | Project Objectives and Goals | Clearly defined objectives and goals that the project aimed to achieve | | |
| 2 | Scope and Deliverables | Documentation of the project's scope and a list of deliverables originally planned | | |
| 3 | Key Performance Indicators (KPIs) | Quantifiable measures that indicate the project's success, such as cost performance, schedule adherence, quality metrics, etc | | |
| 4 | Project Timeline | Evaluation of the project's timeline, including | | |

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|---|----------------------------------|---|--|--|
| | | planned vs. actual milestones and completion dates | | |
| 5 | Resource Utilization | Analysis of how project resources, including human resources, budget, and materials, were utilized throughout the project | | |
| 6 | Risk Management | Assessment of risk identification, mitigation strategies, and how unexpected issues were handled | | |
| 7 | Stakeholder Satisfaction | Feedback from project stakeholders, including clients, team members, and other relevant parties. | | |
| 8 | Budget and Financial Performance | Evaluation of the project's financial performance against the budget, | | |

| | | | | |
|----|-----------------------------|--|--|--|
| | | including cost overruns or savings | | |
| 9 | Quality of Deliverables | Assessment of the quality of the final project deliverables compared to the established standards and requirements | | |
| 10 | Communication Effectiveness | Evaluation of how effectively project information was communicated to team members, stakeholders, and other relevant parties | | |
| 11 | Lessons Learned | Documentation of lessons learned during the project, including what went well, what could be improved, and recommendations for future projects | | |

| | | | | |
|----|---|---|--|--|
| 12 | Adherence to Regulations and Compliance | Evaluation of whether the project complied with relevant regulations, legal requirements, and industry standards | | |
| 13 | Sustainability and Environmental Impact | Assessment of the project's impact on the environment and its sustainability practices | | |
| 14 | Change Management | Examination of how changes to project scope were managed, including their impact on timeline, budget, and quality | | |
| 15 | Post-Implementation Review | Assessment of how well the project results meet the intended objectives and if there are any post-implementation issues | | |
| | Documentation and Reporting: | Adequate documentation of project activities, outcomes, and a | | |

| | | | | |
|--|---|--|--|--|
| | | comprehensive report summarizing the evaluation findings | | |
| | Continuous Improvement Recommendations | Suggestions for improvements in project management processes and methodologies for future projects | | |
| | Final Project Assessment | A summary of the overall success and effectiveness of the project based on the evaluation result | | |
| Note: The contents of this framework were extracted from several online sources and modified for the purpose this project. | | | | |

Research Summary

The purpose of this qualitative study was to explore Secondary School Teachers' Perceptions of Professional Development in an Urban School District in Liberia. The intended outcome was to acquire an understanding of teachers' perception of the strength and weakness of the district PD. Findings from the study showed that the PD consisted of gaps and hence required reform. To implement the reform, I selected to propose a project as policy recommendation as a pathway towards the reform. The pathway is in the form

of a structured districtwide professional development program to equip teachers with research-based adult learning strategies.

Project Implications

Summary of Possible Social Change

The purpose of this study was secondary school teachers' perceptions of the strength and weakness of the USD PD. It aimed at understanding how teachers felt about the existing deficient PD at USD. Analysis of the data from the Zoom interviews revealed that the PD contained gaps that were contributing to its deficiencies. Positive social changes could occur by implementing the policy recommendation proposal. Students test scores could improve and give the district higher status among other districts where public education is offered. USD could better serve students by the district leaders approving the policy recommendations and enacting it as a pathway to reform the present deficient PD program. Public education could ensure the fair allocation of resources within classrooms.

Importance of the Project

A district's effectiveness is measured by reports of student academic performance. The project is important because it will provide a concrete pathway and direction to reform the district PD. Implementing the project would address issues arising from themes that emerged from the analysis of the teachers' perceptions. The implementation of the PD may help teachers improve their skills and create social change within the community by generating social behavior change among the relevant stakeholders. This project study may be an input to other interventions launched by the

Ministry of Liberia to create social behavior change among education stakeholders including teachers.

Section 4 addressed the project's strengths and limitations, recommendations for alternative approaches, scholarship, project development, leadership, and positive social change, reflection on the importance of work, implications, applications, and directions for future research.