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College Freshman Perceptions of Social Media Use for Authentic Learning in Composition Courses

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This is to certify that the doctoral dissertation by

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2019

Abstract

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MA, Mercy College, 2011

BS, Lander University, 2007

Dissertation Submitted in Partial Fulfillment

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Abstract

Social media has been used as an instructional tool for authentic learning in order to enable adaptability through experimentation and action rather than passive listening and regurgitation. The problem addressed in this study is that it is not known how English composition students' perceptions of authentic learning are impacted by the use of online social media as instructional tools. Authentic learning is characterized by multiple elements, including collaboration, reflection, and communication. The purpose of this quantitative study was to determine the perceptions of undergraduate 1st year freshmen composition students using social media as instructional tools, across 9 elements of authentic learning. Bandura's social cognitive theory and Siemens' theory of connectivism guided this research study:. Research questions were used to examine the relationship that exist across undergraduate freshman composition students' perceptions using social media (i.e., Facebook and Twitter) as instructional tools of the 9 elements of authentic learning. A previously validated survey instrument aligned to Herrington and Oliver's authentic learning framework was used to collect data from 50 students and then analyzed using a Pearson product correlation. Data showed multiple statistical significances and revealed that students perceived that social media provided them opportunities to collaborate, reflect, and articulate authentically when it was used as an instructional tool. The results from this study may contribute to social change by providing insight into whether or not universities should support faculty who want to use social media as an authentic learning strategy with college students.

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Dedication

This dissertation is dedicated to my father, who was so proud of my decision to enter into a PhD program, but died before I finished. This completion is bittersweet, because my father is not here to share it with me. This dissertation is dedicated to my mother, for her continuous support, emotionally, financially, and intellectually, when things got rough. Finally, this dissertation is dedicated to my husband, Michael, for his unending positivity and love as I pursued my dream of becoming Dr. Platt.

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I would like to acknowledge Dr. Darci Harland for her encouragement and assistance throughout this whole endeavor. I could not have completed this without her constant optimism; she always had confidence in me and my abilities. I would also like to offer my gratitude to my committee members Dr. Michael Marrapodi and Dr. Jennifer Lapin for their guidance and understanding. These vital instructors assisted me while I finished this endeavor and made it the most complete representation of six years of work.

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Chapter 1: Introduction to the Study

Introduction

The purpose of my quantitative study was to determine the perceptions of undergraduate first-year freshmen composition students using social media as instructional tools, across nine elements of authentic learning. Although I did not design this study to find a cause-and-effect connection, the results may help instructors and students make better-informed decisions regarding the most authentic utilization of online social networks as instructional tools for undergraduate students. I used the literature to highlight the increase in the accessibility of technology could help students and support authentic learning if using technologies as instructional tools.

In this chapter, I provide a brief background on authentic learning, online social networking as an instructional tool, and student perceptions of online learning. This chapter also includes the problem statement, the purpose of the study, the research questions, and the hypotheses. The theoretical framework of the study follows, which includes a brief description of theoretical background and how it may be a factor in the social learning of the students. Next is a discussion of the nature of the study, followed by a list of pertinent definitions. A discussion of the assumptions, scope and delimitations, and limitations follows. This chapter ends with a statement of the significance of the study and a brief summary.

Background

The importance of authentic learning was first emphasized by Brown, Collins and Duguid (1989), who explained it as “the ordinary practices of the culture” (p. 38). Since that time, other researchers (e.g. Chambers & Stacey, 1999; Honebein, Duffy, &

Fishman, 1993; Lebow & Wager, 1994; Reeves & Reeves, 1997; Stein, Isaacs, & Andrews, 2004) have concentrated on the fundamental role of an authentic learning setting as the most critical element in authentic learning. The literature supporting this study related to three specific areas: authentic learning, online networking as an instructional tool, and student perceptions of online learning. Authentic learning is defined as the ability to engage in academic pursuits that are characterized by relevant, deep, and rigorous academic inquiry and knowledge production (Bozalek et al., 2013). This research supported the idea that authentic learning links the gap made between technology and the learning context. For students, the objective should be getting teachers to view social media as a pedagogical implement to enhance learning or transform how learning happens (Banas & York, 2014). The solution as to whether or not to include social media in daily lessons is not viewing social media as a secondary subject area, but more accurately as a pedagogical device that enhances learning while leaving the subject intact.

Researchers have defined authentic learning by multiple elements and suggest that many components are needed in order to be successful (Herrington & Oliver, 2000). The collection of characteristics were developed by multiple researchers after studies examining the classroom environment, the classroom content and its connection to real-world application, and student collaboration (Banas & York, 2014; Bozalek & Watters, 2014; Herrington et al., 2010). Authentic learning, when achieved at the highest level, is the epitome of well-rounded learning, full comprehension, and teaches adaptability through experimentation and action rather than passive listening and regurgitation. Authentic learning is “a multidisciplinary, pedagogical approach” that grants learners,

under the advice of their instructors, to study, debate, and significantly create ideas and connections in the subject of *real* projects and problems (Banas & York, 2014, p.731). Studies have shown that authentic learning can be conducted through social media in order to increase learning and enhance student-to-student interactions, student social engagement, the building of campus community, and involvement with campus life (Bozalek & Watters, 2014; Herrington, & Parker, 2013; Herrington et al., 2010).

Research focused on authentic learning and social media as an instructional tool has continued since authentic learning's first description by Herrington and Oliver in 2000, but the research on student perceptions of their authentic learning when social media used as an instructional tool limited. A 2011 report by Pearson revealed that around 90% of the American teaching staff surveyed had embraced social media as both a professional and educational device (Cooke, 2017). Previous research shows that about two-thirds of all teaching faculty utilized social media in class, and about one-third of faculty utilized it to present students with the material. Furthermore, over 40% had associated it with coursework, and 20% expected students to take part in online discussions; moreover, 80% used online content as a major source of instruction (Cooke, 2017). New methods of teaching and learning brought into production through the initiation of social media and software can appear to have enhanced the growth of talents, for example, communication, improved perception of a subject, and reflexive practices via forums like Twitter and Facebook.

Online networking as an instructional tool is under review in a number of ways. Social networking allows students to collaborate and work together via online social networking sites. The utilization of social media by first-year undergraduate freshmen

students as an instructional tool have increased due to the overabundance of accessibility of personal devices and increasingly has become a mode of instruction for authentic learning (Gonzalez, Davis, Lopez, Munoz, & Soto, 2013). Modifying technology to improve learning and teaching engages students. Utilizing social media to inspire student cooperation and interaction while also letting the students lead their education is in alignment with connectivism, and it increases students' achievement by using recognizable tools (Zielinski, 2017). Various colleges have exhibited success because of the use of social media to engage students (Arteaga Sánchez, Cortijo, & Javed, 2014; Dalsgaard, 2016; Lasker & Vicneswararajah, 2015; Sandlin & Peña, 2014; Sarapin & Morris, 2015; Zielinski, 2017). Greater levels of student involvement and content integration linked to a shift from traditional lectures to more media-based materials (Zielinski, 2017). Instructors gave an account on a variety of techniques and processes, including Twitter, YouTube.com, Google Earth, Facebook, wikis, Second Life, blogs, and more, all geared in the direction of enriching the learning outcomes of a generation of students (Sarapin & Morris, 2015). Using social media has also been shown to improve student learning and engagement. Zielinski (2017) stated that sharing notes through social media benefited students and sharing class material students proved successful in class and afterward. Technology has radically changed the way postsecondary institutions work together and communicate with students (Sandlin & Peña, 2014). One of the first ways in which undergraduate students interact with post-secondary institutions is through social media (Sandlin & Peña, 2014). Research shows that social media can be effective useful tool to engage students academically.

Student perceptions of using social networking as part of courses are mixed. While online social networking sites are popular with undergraduate students, with an estimated 60% of students using them, the extent of the impact on undergraduate students' authentic learning experiences is unclear (Fournier, Hall, Ricke, & Storey, 2013). Through an evaluation of the current research on student perspectives of social media as an instructional tool, researchers hope to determine whether social media in education is positively or negatively perceived (Fournier et al., 2013). A 2011 report by Pearson indicated that approximately 90% of the American instructors welcomed social media as both a professional and educational tool. Their survey showed that about two-thirds utilized it in class, and about one third utilized it to supply students with information. Additionally, over 40% had linked it to coursework, and 20% required students to participate in online discussions; additionally, 80% used online videos (Cooke, 2017). This study not only fills a gap in the literature regarding student perceptions of their authentic learning when social media used as an instructional tool but may also provide valuable information for future studies. If students perceive online social media a valuable tool, future studies may be able to determine if online social media are an authentic instruction tool to utilize. This area of research may ultimately help instructors make better-informed decisions about whether or not to include online social media in their instruction.

Problem Statement

The problem that I addressed in this study was that it is not known how English composition students' perceptions of authentic learning are impacted by the use of online social media as instructional tools. Few researchers have addressed the use of such tools

and how these might influence students' perceptions of authentic learning. The Higher Education Research Institute has not conducted a study regarding online social networking sites and freshmen in college since 2007, making their findings relevant but outdated (HERI, 2015). In addition, although the Pew Institute of Research has conducted annual studies regarding the use of social media and social networking sites by freshmen students, this annual research is limited because it is not specific to which social media outlets (Perrin, 2015). Existing research does not narrow the wide range of social media available to one specific venue of media interaction; for example, whether or not Twitter and/or Facebook are beneficial to composition students' authentic learning.

For this quantitative study, I examined if there was any relationship between using Facebook and/or Twitter as instructional tools and the perceptions of authentic learning of undergraduate composition students. In addition, studies like Alt's (2017) show that instructional and media design principles are important to the instructor's role and for the usefulness of student-centered activities as one approach among many, but few instructors have officially sanctioned the use of social media as an instructional tool. At this time, there is not enough evidence to suggest the potential positive relationship social media may have on the authentic learning of students; while Twitter and Facebook are used in many countries and have received significant attention in education, quantitative research on this technology for educational purposes is relatively uncommon (Tur, Marín, & Carpenter, 2017). Few instructors have addressed the use of such tools and how they do and do not inform authentic learning. What is still not understood is student perceptions. Authentic learning is tantamount to student comprehension, and thus, the application of learning to real-world scenarios.

In this research study, I addressed the need for further study regarding the use and implementation of contemporary social networking sites as instructional tools and added to the literature regarding student perceptions of these tools in the college classroom setting. Regardless of the substantial role that social media takes part in college students' daily lives, there is insufficient research on faculty inclusion of these sites in undergraduate students' educational experiences, especially in the composition classroom. Such research on social media in the composition classroom is vital because students anticipate a technologically enriched educational experience. A 2013 Noel-Levitz study observed that roughly half of the students desire a campus that interacts with them through emails, texts, and social media (Vie, 2015). In the same way, a 2014 study by EDUCAUSE learned that the bulk of undergraduates confirmed that technology makes them feel more connected to "other students (51%), their instructors (54%), and their institution (65%)" (Dahlstrom & Bichsel, 2014, p. 10). Students are composing more and more of their everyday writing in digital spaces, including social media, solidifying the importance and necessity of including those digital spaces in instructional practice. Yet, insufficient prior quantitative research on social media has focused on educational uses. While certain research on social media in education has encompassed authentic learning models, a quantitative approach that seeks to deconstruct differences among participants from various contexts has been missing (Tur et al., 2017).

Purpose of the Study

The purpose of my quantitative study was to determine the perceptions of undergraduate first-year freshmen composition students using social media as instructional tools, across nine elements of authentic learning. The utilization of social

media by undergraduate students as an instructional tool has increased due to the overabundance of social media as a mode of instruction using students' devices (Gonzalez et al., 2013). The availability of social media as a means of communication and interaction has increased, making it an ideal platform from which to launch educational tools and curriculum. Use of online social networking sites, like Facebook and/or Twitter, is widespread with undergraduate students, with more than half of the student population using them (HERI, 2015); however, the degree of the impact on undergraduate students' authentic learning blurs (Fournier et al., 2013). Therefore, there is a need for increased understanding regarding the relationship between using Facebook and/or Twitter and students' perceptions of their authentic learning experiences.

Research Questions and Hypotheses

Research Question 1 (RQ1): For undergraduate freshman composition students utilizing social media (i.e., Facebook and Twitter) as instructional tools, what relationships exist across student perceptions of the nine elements of authentic learning? According to Herrington and Oliver (2000), the nine elements of authentic learning include:

> 1) Provide authentic context that reflects the way the knowledge will be used in real-life; 2) Provide authentic activities; 3) Provide access to expert performances and the modeling of processes; 4) Provide multiple roles and perspectives; 5) Support collaborative construction of knowledge; 6) Promote reflection; 7) Promote articulation; 8) Provide coaching and scaffolding; and 9) Provide for authentic assessment of learning within the tasks (p.4).

Null Hypothesis (H_0): There are no statistically significant relationships across perceptions of the nine elements of authentic learning.

Alternative Hypothesis (H_1): There are statistically significant relationships across perceptions of the nine elements of authentic learning.

Theoretical Framework

I used two theories to guide my research study: Bandura's (1977) social cognitive theory and Siemens' (2005) theory of connectivism. Bandura's (1977) social cognitive theory states that individuals do not merely respond to environmental events; they aggressively construct their own environments and take action to change (Oppong, 2014). An online social networking site such as Twitter or Facebook can be used to construct knowledge socially, and therefore aligns with the social cognitive framework described in Bandura's (1977) theory. Herrington and Oliver (2000) were the originators of the nine elements of authentic learning and others (Bozalek et al., 2013 & Bozalek & Watters, 2014) developed surveys based on these elements. The purpose of the survey is to illicit student perceptions of authentic learning within in a course. Elements of the authentic learning align well with the social cognitive framework. Bandura's (1977) social cognitive theory provides the framework for positive collaboration through social media, an important piece of authentic learning.

The second element of the theoretical framework was Siemens' (2005) theory of connectivism. This theory supports the creation of instructional environments impacted through technology that connect students as they learn. Learning is a progression that happens within imprecise environments of ever-changing central elements and not wholly under the control of the individual, much like the way students are not able to control the

online social networks available to them. The premise of Siemens' (2005) theory of connectivism aligns well with the Perceptions of Authentic Learning Survey, because the theory directly applies to online social environments and the development of those environments using technologies like social media. Connectivism is a learning theory that describes how online technologies have formed innovative opportunities for students to share and learn information through the world wide web and between each other. These technologies consist of email, web browsers, wikis, social media, online discussion forums, and any other tool which enables the users to learn and share information with others. A crucial component of connectivism is that much learning occurs within peer networks that take place online (Siemens, 2005), such as undergraduate students being asked to use Twitter or Facebook, which is why connectivism was a good framework for my study. In connectivist learning, teachers lead students to data and test material with the intention of supporting students sharing and learning on their own, at their own pace (Siemens, 2005). Students are likewise stimulated to pursue content on their own online and express what they find; that form of learning is authentic and by definition. The Perceptions of Authentic Learning Survey measures student perception of the level of interaction and whether or not students have interacted at optimal times _Bozalek et al., 2013; Bozalek & Watters, 2014). Chapter 2 includes a more thorough description of these theories.

Nature of the Study

This was a quantitative study in which I examined first-year undergraduate freshmen composition students' perceptions of their authentic learning when social media was used as an instructional tool. I used variable one, student perceptions of authentic

learning, and variable two, the use of Facebook/Twitter as instructional tools to measure responses using anonymous surveys. I used the Perceptions of Authentic Learning Survey to measure student perceptions of their own authentic learning designed according to the nine elements of authentic learning. The online Perceptions of Authentic Learning Survey had 41 questions, divided into the nine elements of authentic learning; the questions were Likert-type questions asking students to assess their authentic learning on a scale of 1 to 5. I analyzed the data using Pearson production correlation in order to determine whether or not students perceive that their learning was authentic when instructors used either or both of these online social networking options to support instruction in a freshman composition course. This study design was appropriate because Pearson's production correlation was used to find a linear relationship between two variables. Pearson's product correlation is used when there is a linear relationship between variables and within specific groups. A quantitative design was the best approach because data originated in the form of numbers and statistical results and gathered through the use of a survey with close-ended questions with quantifiable answers that were structured and laid out in advance of the study.

Definitions

The following list of terms is integral to this study and have the distinctive, research-based meanings recorded in this section.

Authentic learning: This phrase refers to the ability to engage in academic pursuits that are characterized by relevant, deep and rigorous academic inquiry, and knowledge production and characterized by nine specific elements (Herrington & Oliver, 2000).

Connectivism. This is defined as "the integration of principles explored by chaos, network, and complexity and self-organization theories" (Siemens, 2005, p. 5).

Nine elements characterizing authentic learning. Authentic learning is characterized and measured using specific elements: "1) Provide authentic context that reflects the way the knowledge will be used in real-life; 2) Provide authentic activities; 3) Provide access to expert performances and the modeling of processes; 4) Provide multiple roles and perspectives; 5) Support collaborative construction of knowledge; 6) Promote reflection; 7) Promote articulation; 8) Provide coaching and scaffolding; and 9) Provide for authentic assessment of learning within the tasks" (Herrington & Parker, 2013, p. 1).

Social media: "Forms of electronic communication (such as websites for social networking and microblogging) through which users create online communities to share information, ideas, personal messages, and other content (such as videos)" (Carrascosa, Cuevas, Gonzalez, Azcorra, & Garcia, 2015, p. 2).

Social networking site (SNS). "SNSs web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system. SNSs are currently the most popular type of social software because they facilitate the combined usage of many Web 2.0 technologies into single platforms that work as virtual gathering places for social interactions" (Bozkurt, Karadeniz, & Okur, 2015, p. 4686).

Assumptions

For the research, I made the following assumptions: (a) respondents would provide honest and forthright responses to the surveys, (b) students of the university were more likely to have or use some form of social media, (c) faculty members recorded in the university's email list had access to a computer and the Internet at home or the office to read emails, and d) Pearson production correlation assumes that the two variables will be measured at the interval or ratio level. Furthermore, there was a linear relationship between the two variables in each correlation calculation, and there were no significant outliers. Finally, the variables were approximately normally distributed.

Scope and Delimitations

The scope of this study was limited to fulfill a specific purpose to address a narrow research problem. I achieved internal validity when I placed the structure and behavior of a study system properly into place using guidelines and security measures developed by Walden's Institutional Review Board and the study site's Institutional Review Board. If an experiment is not internally valid, then the researcher cannot say that the treatment given in the experiment is the cause of the effect observed (Shadish, Cook, & Campbell, 2001).

If a test is not outwardly valid, then its findings cannot be said to continue beyond the testing setting. Therefore, even if internally valid, the researcher cannot utilize its findings to say anything relevant to the world (Shadish et al., 2001). Specifically, internal validity refers to the estimated validity with which the researcher concludes that a correlation between two variables is fundamental or that the absence of a relationship suggests the absence of reason. External validity refers to the approximate validity with

which the researcher infers that the supposed causal relationship can be indiscriminate to and crossways different measures of the effect and cause and among varied types of surroundings, subjects, and times. In order to overcome the limitations regarding the generalizability of the experiment, or even its external validity, I suggest that other researchers duplicate this study in analogous, similar, circumstances (e.g., that they repeat the study in other countries or in settings that differ from the English classroom yet relate to it in relevant aspects, like still at a college or university level, a technical school, etc.). My study included full-time undergraduate freshman composition students, male and female, enrolled at an average size public university in the Southeastern United States during the 2018–2019 academic year. An online survey was used to gather data. I statistically analyzed the data for relationships between the students' perceptions of authentic learning and their use of Facebook and/or Twitter as instructional tools in undergraduate freshmen composition courses.

Limitations

The study was limited by the participant selection. There were approximately 21,883 undergraduate students in the school, the population being studied is limited to a smaller portion of that due to those first-year freshmen taking English 101 and 102. There were approximately 3,435 freshmen students between the ages of 18 and 19, of which the traditional make up included approximately 71% white, 21% African American, 2% Hispanic, and the other 6% of unknown ethnicity, and divided unevenly into male and female groups, 56% and 54% respectively. Because I used a convenience sample, there was a limitation in generalization and inference about the entire population. This limitation may have influenced the study in that the results were specific to these

scenarios and may not hold true for all universities in the country. However, it is essential to note that, despite the limitations, the findings will be useful for improving authentic learning and instruction at this specific university and others of similar size, atmosphere, and demographics and for providing improvement opportunities and further research prospects on the subject.

There were other limitations of the study related to the test chosen for the study. Pearson correlation limitations include bearing in mind direct relationships, r and slightest squares regression were unaffected by outliers, there might be variables more than x which were not considered, yet did affect the response variable, and a strong correlation did not suggest cause and effect relationship. One more point related to the limitations of this study related to the statistical analysis technique used. Through Pearson product correlation, I measured the linear correlation between two variables. Because the characteristics and factors were self-reported on a Likert scale, participants may not have had the same internal definitions of scale ratings. Such self-reporting can lead to different interpretations of the characteristics, which limit the ability to generalize my findings. The quantitative study itself has limitations. According to Creswell (2009), a quantitative study can show an improper representation of the target population due to the sampling done; a population sampling is a small representation of the population there. Another limitation is the lack of resources for data collection. Quantitative research usually requires a large sample size. However, due to the lack of resources, this large-scale research becomes a problem. There is also the inability to control the environment. Researchers cannot control the environment where participants answer surveys. The most challenging limitation is the limited outcomes in a quantitative study. Quantitative

research involves a structured survey with close-ended questions. It leads to limited outcomes outlined in the research proposal. The results do not always represent what is actually occurring or always explore the why or how. As a result, quantitative research may give a false impression of homogeneity in a sample.

There is also a potential bias that could be a limitation of the study. There are many types of bias possible in a quantitative study. For example, I am an English teacher and have used social media with my own students. In order to reduce my own bias, as much as possible, I used a random selection of participants and maintained the anonymity of my study participants. I had absolutely no direct contact with any participant, making it extremely difficult for me to color any of my results from the participants' end with my bias. While analyzing data and reviewing literature, the researcher may naturally look for data that confirms their hypotheses, overlooking data inconsistent with personal beliefs, exacting bias on the study (see Frankfort-Nachmias, & Nachmias, 2015). In order to prevent the problem of bias, I used SPSS and the Pearson product correlation analysis tool.

Significance

Despite the growing demand for online tools in authentic learning and the universal influence of social networking sites, there is a gap in the literature about the use of social networking sites as learning tools. The results of this study may be used by administrators, professional development personnel, instructors, researchers, and policymakers to determine ways to improve the adoption of social networking sites and promote authentic learning. In addition, this study may contribute to current knowledge about the adoption of social networking sites and contribute to the existing literature. The

findings may provide other researchers with a knowledge base containing relevant data, information, and answers to questions that will expand the literature regarding both authentic learning and student perceptions of social networking sites. The findings from this study may assist administrators and teaching faculty at universities in determining student perceptions of social networking sites as instructional tools in order to reduce, minimize, or overcome perceived barriers to teaching and learning environments that include digital supports.

Summary

This chapter included an introduction to the study, an explanation of the problem being investigated, and an outline of the purpose of the study. I presented background information on authentic learning, social networking sites, and the educational setting. The use of online instructional tools in education has grown exponentially and viewed as a means of expanding student access and developing critical technology skills. Social networking sites are a means of communicating and teaching, and the university identified in this study employs social networking sites as instructional tools. No researcher has explored the perceptions of students regarding online social networking as instructional tools and how that use may affect authentic learning. Finally, I outlined the significance of the study and how the study may affect positive social change.

In Chapter 2, I provide an overview of the literature reviewed concerning authentic learning, online social networking as instructional tools in the United States, and student perceptions of social networking used as an instructional tool. I also provide an an analysis of Bandura‘s (1977) social cognitive theory and Siemens’ (2005) theory of

connectivism and related studies regarding factors that influence students' authentic learning and online social media.

Chapter 2: Literature Review

Introduction

In this study, I examined English composition students' perceptions of authentic learning when online social media are included as instructional tools. Few instructors have addressed the use of such tools and how they do and do not inform authentic learning. Little research has been done about student perceptions related to social media use and authentic learning. The purpose of my quantitative study was to determine the perceptions of undergraduate first-year freshmen composition students using social media as instructional tools across, nine elements of authentic learning.

Literature Search Strategy

I conducted my search for literature using the key terms *authentic learning, social networks, online social networking as instructional tools, and Twitter and/ or Facebook in the classroom, and social media and authentic learning,* and *professional development,* all within the time range of 2013–2019, in order to obtain the most recent and current materials. In the literature, I examined authentic learning, online social networking as instructional tools, and student perceptions of online social networking used in the classroom setting. I searched the following sites and search engines for journal articles, studies, and resources: Academic Search Complete, Education Source, ERIC, Child Trends Databank, Sage Journals, GOOGLE Scholar, and Thoreau Multi-Database Search, ERIC and Education Source Combined.

Theoretical Foundation

Two theorists guided my research study: Bandura's (1977) social cognitive theory and Siemens' (2005) theory of connectivism**.** Bandura's (1977) social cognitive theory

describes that individuals do not merely respond to environmental events; they aggressively construct their own environments and act to change them (Oppong, 2014). Bandura's (1977) social cognitive theory provides the framework for positive collaboration through social media. Siemens' (2005) theory of connectivism includes the creation of instructional environments impacted through technology (Thota, 2015). Technology has reorganized how learners communicate and learn, reflecting the importance of collaboration between learners, as a way of improving learning outcomes and motivating greater engagement with learning, all of which Siemens' included in (2005) connectivism theory. Although connectivism is a relatively newer theory, it includes how society is changing because of the availability of Web 2.0 and various forms of social media (Garcia, Elbeltagi, Brown, & Dungay, 2015). In one study, new empirical research in the area of connectivism validated the concept of connectivist learning social media, which explains the changing nature of teaching and learning (Garcia et al., 2015). Garcia et al. (2015) also concluded that the use of social media in a connectivist learning model results in greater degrees of peer critique, support and guidance, further validating the theory of connectivism in relation to social media and its effects on student learning. Additionally, the findings of Chung and Paredes' (2015) study provided further evidence of the importance of social networks in affecting learning, and the results align with the key components of Siemens' (2005) theory of connectivism (Chung & Paredes, 2015). Steffens (2015) expands further on the implications of connectivism theory studies, stating that the aim of connectivism theory is to explain collaborative learning in virtual learning environments. Connectivism theory better describes and explains lifelong learning in a digital age, while it presents visions

that perceive learning as an integral part of meaning-making (Steffens, 2015). Although these definitions are from varying sources, the main idea is consistent; connectivism theory was ideal for my study because of its lens through which to view digital instructional tools and in-depth, authentic learning.

Authentic Learning

Authentic learning, defined as the ability to engage in academic pursuits characterized by relevant, deep and rigorous academic inquiry and knowledge production, is necessary for full comprehension and real-world application (Herrington & Oliver, 2000). Researchers describe authentic learning as ordinary practices of the culture that are not merely useful; they are essential, because of their ability to maintain student involvement and their realistic application (Quigley, 2014). Researchers have gone further to suggest that authentic learning requires the use of practicing that application repetitively; when given opportunities to practice that engagement in real-life situations, students report a better understanding of the material. Practicing skills in an appropriate situation or environment, like an online learning environment, for a course is linked with improved student learning (Zielinski, 2017). The absence of appealing online learning is predominantly apparent in the higher education part where learning management systems (LMSs) are utilized mainly as instructivist material distribution vehicles, instead of as constructivist environments that enable learning (Parker, Maor, & Herrington, 2013). If teachers neglect to use technology to enhance student learning, students will have less frequent opportunities to advance the 21st-century learning abilities they will want to weigh in be part of society and to be effective at their professions (Banas & York, 2014).

One ground-breaking solution for altering existing teaching methods is to create an online course built on authentic learning principles, where university experts are engrossed in the pedagogical environment and utilize social media sites for instruction (Parker et al., 2013). The utilization of social media by undergraduate students, ages 18-20, as an instructional tool, has increased due to the overabundance of social media as a mode of instruction through students' personal devices (Gonzalez et al., 2013). Authentic learning derives from Vygotsky's (Amory, 2014) argument that learning is never direct but continuously intervened by cultural and psychological implements. No standard makes a learning action authentic. More precisely, authentic learning is a group of features (Banas & York, 2014). Authentic learning is characterized and measured using specific elements:

> 1) Provide authentic context that reflects the way the knowledge will be used in real-life; 2) Provide authentic activities; 3) Provide access to expert performances and the modeling of processes; 4) Provide multiple roles and perspectives; 5) Support collaborative construction of knowledge; 6) Promote reflection; 7) Promote articulation; 8) Provide coaching and scaffolding; and 9) Provide for authentic assessment of learning within the tasks (Herrington & Parker, 2013, p. 1).

Furthermore, students' learning experiences should connect to their day-to-day life experiences beyond school. This learning marks a retreat from traditional education, which continues to influence countless learning structures and, which makes holes between education, employment, and living in contemporary society (Bhagat & Huang, 2018). Treating the recommended textbook as the only foundation of information and a

handbook for assessment is one of the main motives why other sources are left behind. Thus, students must acquire comprehensive, versatile skills and knowledge. According to Bhagat and Huang (2018), there are four essential higher-order skills related to authentic learning: "(a) critical thinking and problem solving, (b) communication, (c) collaboration, and (d) creativity and innovation" (p. 4).

Authentic learning, when achieved , is the epitome of well-rounded learning, full comprehension, and teaches adaptability through experimentation and action rather than passive listening and regurgitation. Studies have shown that authentic learning can be conducted through social media in order to increase learning and enhance student-to-student interactions, student social engagement, the building of campus community, and involvement with campus life (Bozalek & Watters, 2014; Herrington, & Parker, 2013; Herrington et al., 2010). Authentic learning also includes influential learning environments, rich contexts, realistic tasks, and an adaptive curriculum, some of which require collective learning, collaboration, and communication, supporting the idea that online social networking would support authentic learning (Bozalek & Watters, 2014). Bozalek and Watters (2014) put forward an alternative way of achieving learning objectives by focusing on authentic learning, an approach to learning developed by Herrington et al. (2010), rather than, or in addition to, curriculum alignment alone. Other researchers suggest that authentic learning as a pedagogical method to involve the students in resolving real-life challenges through learning by doing, acting, project-based learning, and problem-based learning, are a few of the educational activities that are crucial to student success. Some imperative gains of authentic learning are: "(1) boosts motivation; (2) better learning opportunities; (3) preparation for better future; (4) makes a

complex concept easier to understand; and (5) blends theories with learning" (Bhagat & Huang, 2018, p. 5).

A further aid to developing graduate attributes through the framework of authentic learning is by making use of online social media and emerging technologies. Evolving technologies are devices, ideas, innovations, and improvements used in varied educational surroundings to serve diverse education associated purposes (Bozalek & Watters, 2014). These technologies transcend disciplinary boundaries, offer new ways of interacting across contexts, and provide the potential for transformative educational practices. This potential for transformative practices that allow for the development of the desired graduate attributes and which make authentic learning possible in higher education contexts. Authentic learning characteristically focuses on real-world, complex problems, and their solutions (Nicholl, Flutter, Hosking, & Clarkson, 2013). In that sense, authentic learning introduces students to learning tasks that reflect genuine problems as experienced by professionals and mimics their professional information-gathering and decision-making processes, using realistic equipment and strategies.

Since colleges and universities have made an effort to reform teaching and learning practices in higher education, authentic learning has become a common thread among planning and preparing students for their lives after graduation. In Zielinski's (2017) qualitative research, there was a dominant trend showing that the authentic learning experience given by the teacher was connected with complex perception and conception of the content according to the students, especially when technology is utilized to enhance that authentic learning. Zielinski's research centered on seven study participants, instructors, who answered face-to-face interview questions regarding

authentic learning and constructivists teaching strategy. The overall phenomenological analysis centered on cooperation, authentic learning, connecting with previous knowledge, and technology utilization. All participants recognized that their instruction altered in some method because of what they learned in the clinics about authentic learning and collaboration. All instructors reported using some form of authentic learning. Participants stated the use of labs, service learning and internships, and the use of real-life instances during a class lecture or as a task (Zielinski, 2017). Specifically, five of the participants mentioned types of technology needed in their authentic learning classroom; the technology included operating systems, software (PowerPoint presentations), digital hardware, and the use of online materials (appropriate YouTube and TED Talks; Zielinski, 2017).

Exploration has also revealed the fact that learners who were involved in authentic learning activities have a tendency to have the capability to differentiate between reliable and unreliable information, the tolerance to track lengthier lines of reasoning, the aptitude to identify pertinent patterns in new settings and the flexibility to work crossways through multiple discipline and cultural limits to create innovative resolutions (Cydis, 2015; Jalil Safuan, & Soh, 2013; Lane, 2017; Meriläinen & Piispanen, 2013). For example, authentic learning with technology incorporation extends chances to assistance learners, boosts, engagement and forms a vital element of improvement in 21st-century teaching and learning, according to some studies (Cydis, 2015). Cydis' qualitative study included a criterion-based, non-probability sampling method to examine the web-based programs, hand-held interactive devices aiding learners to answer prompts, a web-based program, and online discussion forums using surveys, content

analysis, and observations, all with the following results. Participants recognized the importance of technology integration and an authentic need for technology, and as a result, demonstrated that the need for incorporating technology significantly increased student ability with explicit technology instruments (Cydis, 2015). Instructors must make technology an important portion of the program. Emphasizing the vital role of technology in authentic learning offers the chance to improve the model used to nurture student proficiencies and technology (Cydis, 2015). Again, authentic learning means that which necessitates learners to create meaning, a question to construct meaning, discuss and reflect on information, and make or achieve tasks that have standards of value beyond success in school. Cydis' (2015) concluded that learning should be authentic and linked to real experiences, which compels learners to use abilities and knowledge and complete assignments to resolve earnest challenges like realistic applications. This study promoted technology literateness and the instructional habits students obtain in teacher education through pedagogical procedures that seek to combine authentic, performance-based chances for nurturing technology literateness in prospective teachers (Cydis, 2015). The utilization of technology as part of the pedagogical exercise in teacher instruction courses assists as a chance to combine authentic prospects for gaining technology literateness as a capability.

Authentic learning is the instructional approach best suited to simplify learning and convey real-life experiences inside the teaching space using technology (Herrington & Oliver, 2000). Presently, technology devices like tablets and mobile phones are extremely common among students in the educational setting (Bhagat & Huang, 2018). These devices afford chances for learning that are universal, permitting learners to gain

access to information from any location at any time. For students, effectual learning approaches and reinforcement should be afforded to make correlations to present knowledge and to study new knowledge in the learning context (Bhagat & Huang, 2018). Students develop technology literacy as an aptitude through integrative learning, which nurtures learners' capabilities to make associations between innovative and present knowledge, experiences and skills, necessary to respond to fluctuating needs of society.

Jalil Safuan and Soh (2013) examined the effectiveness of authentic learning and the use of Facebook as a communication tool in the process of students' active involvement in university service-learning projects. Data gathered from a survey by Jalil Safuan and Soh (2013) provided further evidence that authentic learning activities extend past the subject of course, where learners revealed to diverse subjects and cultures. As a result, learners can tackle and overcome their problems effortlessly because of the higher-order thinking skills they have to afford them the power to make the correct choice in their impending work environment. Current education systems deal with insignificance unless educators bridge the gap between what way learners live and how they learn (Meriläinen & Piispanen, 2013). Progressing from subject knowledge to learning and life skills is vital when preparing students to be effective in their lives after university. The instructor's test in today's classroom is to reinforce the learners' expected habits to learn and create information in innovative learning settings (Meriläinen & Piispanen, 2013). Thus, learning is something happening in union with an entity and his or her setting, including the digital environments.

Learning through social media is a useful framework through which to develop authentic learning as social media is forward-looking, providing a way of situating

learning in its context for future use in the workplace and as critical citizens (Bozalek &Watters, 2014). Carrascosa's et al. (2015) quantitative study included the retrieval of trending topics at all the available countries in an automated fashion, gathering the list of Local Trending Topics for each country every 5 minutes in over 35 countries. Results showed that online social networking sites are commonly used among undergraduate students because of their accessibility and popularity, indicating that 60% of undergraduate students use online social networking sites in their coursework and specific programs. Since online social networking sites influence undergraduate students' perceptions and behaviors, the use of confidential surveys is crucial to the content validity of my study. Powell, Gray, and Reese (2013) used a similar survey scale method in order to study the level of authentic learning in relation to instructional tools in a general education setting. Powell et al. (2013) surveyed 635 students from two different universities, investigating the detrimental effects of unchecked online social networking site activity on students. Since these results were valid and reliable using the Likert Scale, it is highly likely that using the same scale for survey measurement methods will result in reliable and valid results in my study.

Online Social Networking as an Instructional Tool

In traditional large lectures with 50 students or more, effective interaction between students and their instructor has traditionally been difficult, and some instructors have begun using social media tools to address this problem. Instructors have difficulty in evaluating learners' comprehension of the instruction and have inadequate time to resolve learners' questions. While traditional lectures are not integrally harmful, information travels in one direction, and learners are rarely given occasions to discuss their thoughts

(Rowe, Bozalek, & Frantz, 2013). Furthermore, ample time dedicated to training individual learners who do not concentrate on the lecture, and learners' frequent use of smartphones affects the environment of the lecture (Kim, Jeong, Ji, Lee, Kwon, & Jeon, 2015). These problems have an adverse influence in terms of both academic achievement and lower student concentration levels. It consequently becomes problematic for the instructor to reach the objectives of the lecture (Kim et al., 2015). A survey conducted in 2014 suggested that as many as 57% of students at their university had used social media tools in at least one of their college courses (Hawkins, 2015). Approximately 90% of undergraduate university students use Facebook, and at least 60% of those log in daily (Sarapin & Morris, 2015). The acceptance of a Facebook request from a friend or fellow scholar is something university instructors are dealing with more frequently in this increasingly wired environment. Communication among students, teachers, and organizations immersed in a specific subject enables and speeds up the learning process, creating lasting recollection conceivable (Hughes, Evering, Malloy, & Gambrell, 2014). Facebook remains one of the most-used social media technologies among college students, with 87% using the site in 2014. However, other tools like Twitter, Instagram, and Pinterest are on the rise: 37%, 53%, and 34%, respectively (Vie, 2015). Due to the fame and helpfulness of social networking, learning and teaching from the customary situation have now progressed to the virtual world setting. Instructors have investigated with and informed on a diversity of arbitrated processes and techniques, including Twitter, YouTube.com, Google Earth, Facebook, wikis, Second Life, blogs, and more, all pointed toward refining the learning products of a generation of learners (Sarapin & Morris, 2015).

Previous research largely fixated on interface design and cooperative multimedia components, which did not offer authentic learning activities and contexts for students to collaborate (Jalil Safuan & Soh, 2013). There is little research on the emphasis of authentic learning in social networking, principally of the use of Facebook. Social networking sites (SNSs) are at present the furthermost prevalent sort of social software because they enable the joint use of numerous Web 2.0 technologies into single modes that operate as online meeting spaces for community relations (Bozkurt et al., 2015). Njoroge's (2016) mixed-method study utilized Gagne's Nine Events of Instruction as a framework to examine the kinds of social media applications used. Those events of instruction in Gagne's Nine Events of Instruction are not too far from the nine elements that define authentic learning; they are "1. gain attention; 2. inform learners of objectives; 3. stimulate recall of prior learning; 4. present the content; 5. provide learning guidance; 6. elicit practice; 7. provide feedback; 8. assess performance; and 9. enhance retention and transfer to the job" (Njoroge, 2016, p.64-80). Results signified that approximately 31% of instructors at the college level use different social media types in different ways that related to Gagne's nine events of instructional design (Njoroge, 2016). SNSs offer prospects for higher education institutes in conditions of strengthening their attendance within the public, their influence on society, their efficiency in satisfying their objectives and vision. These organizations are using the possibility of social media technologies for their advantage and adopting the academic opportunities rooted in their practice (Bozkurt et al., 2015). In addition, SNSs generate an online social area where university students can shape and uphold social resources with others. The educational use of SNSs will allow for an improved learning application and higher capacity in enticing students,

compared to utilizing short message service (SMS) or email (Kim et al., 2015). LinkedIn, Google+, Twitter, Academia.edu, Facebook: Regardless of which social media technology utilized as an illustration, the truth remains that these sites are the fabric of our online lives and have radically transformed how students live their lives (Vie, 2015). Since their launch, online social networking sites have packed fulfilled a certain hole in students' social lives, permitting them to more effortlessly hunt for friends and classmates; interact with colleagues and launch a professional existence online; share day-to-day events through images, text, videos, and links; and stay up-to-date with key highpoints like weddings, birthdays, and graduations, all the more so from a great distance (Vie, 2015).

Social media include technologies that simplify social communication, make probable teamwork, and allow debate across stakeholders. The technologies consist of wikis, blogs, media sharing tools, networking platforms like Facebook, and virtual worlds (Wohleb, Skinner, & Witte, 2018). Students between the ages of 15 and 25 are labeled as digital natives and the "Net Generation," denoting they were "born into a technology driven society and are embedded with highly sophisticated technical skills and learning preferences," in which conventional instructors and classrooms are unprepared and outdated (Wohleb et al., 2018, p. 2). Some social media can be employed to ask short questions or to advance students' learning and engagement in an online learning environment by operating as an agent or avatar of the instructor.

To amplify the success of environment-related courses, education methods in a realistic environment must inspire the dynamic involvement of learners, exempt learners from the unnecessary weight of redundant information, and enable the expansion of their

academic aptitudes (Aydın, 2013). Research has begun to surface encompassing the morals and repercussions of online technologies. Until researchers complete additional studies, the exact impact of social media, both positive and negative, remains to be seen (Fleck & Johnson-Migalski, 2015). Although there are some that would argue against the use of SNSs in the classroom, the inclusion of social media sites is important to understand. It may in fact, decrease student vulnerability to disruptions in their classroom by making their course content more attractive and engaging (Gupta & Irwin, 2016). The significance of direct interaction within the classroom is an essential element in improving learners' skill and knowledge; yet, instructing learners to thrive in an online setting and encouraging digital literateness is imperative for the current classroom setting and the world beyond the classroom (Wohleb et al. 2018). With every new practice or trend, it takes routine and practice to be successful. The integration of new technologies is no different. While at first the integration of social media may require instructors to ponder innovative schoolroom managing methods to correct learners for utilizing such tools unsuitably, instructors and learners would eventually have the capacity to utilize a variety of sites for educational purposes, including: professional development, community outreach, collaboration, and discussion (Wohleb et al., 2018).

The use of technology in the classroom can become an everyday occurrence with everyday routines and as a result, become instrumental in providing authentic learning when applied effectively. Research has indicated that the inclusion of SNSs are beneficial to students on various levels when they are applied thus. The advent of SNSs gave a novel outlook to social constructionism and connectivism through the construction of online work revealed in application within social technologies, specifying its essential

elements that divided in three upper-level classes: “exploration of ideas, construction of items and evaluation of items” (Parmaxi, & Zaphiris, 2015, p. 414). Parmaxi and Zaphiris’ (2015) study disclosed that social technologies empowered a set of learners to assemble a shareable online element and improved their reasoning and perception of immaterial concepts by linking them to their online work. In addition, Bozalek et al. (2013) concluded that emerging technologies are capable of stimulating many of the elements of authentic learning, including collaboration across distances, communicating with instructors, sharing of results, and admittance to online research libraries. Mobile devices, and the amenities they afford expand the ability of mobile phones past just oral communiqué, to achieve an assortment of diverse communicative responsibilities (Kuznekoff, Munz, & Titsworth, 2015). Since 95% of students bring their mobile phone with them to class and about 92% admitted that they have sent or received a text message during class, and 30% do every day, it is clear that online social networking offers students the opportunity for authentic learning while promoting collaboration through websites like Facebook and/or Twitter (Kuznekoff et al., 2015).

The utilization of social media by undergraduate first-year freshmen students as an instructional tool has increased due to the overabundance of social media as a mode of instruction through the authentic learning of students’ personal devices (Gonzalez et al., 2013). Online social networking sites are popular with undergraduate students, with an estimated 60% of students using them. However, the extent of the impact on the authentic learning experiences of undergraduate students is unclear (Fournier et al., 2013). Online environments, including social media and social networking sites, have changed the ways in which instructors prepare their students to enter the professional setting by allowing

them to collaborate and share using online social sites (Pomerantz, Hank, & Sugimoto, 2015). Social media usage has grown more extensive, available, and familiar in recent years, with advances in mobile technology and the Internet. Fleck and Johnson-Migalski's (2015) indicate that 73% of adults online use some social networking site, and nearly three-quarters (73%) of teens online and 72% of young adults online use social network sites. That is further substantiated by other studies that state that educational technologies are typically intended to support instructional administrations of teaching and learning; in addition, when technology acts as a conduit, it facilitates knowledge production (Amory, 2014). The Bozalek et al. (2013) quantitative study included similar questions and methodology, focusing primarily on how emerging technologies have affected authentic learning in higher education.

The Pomerantz et al. (2015) study on online environments, including social media and social networking sites, has changed how instructors prepare their students to enter the professional setting by allowing them to collaborate, and share using online social sites. This study portrays the authentic learning of students and instructors who desire communication via social media and it is current. Results from Belangee, Bluvshtein, and Haugen's (2015) survey exploring the use of social media showed that although technologically-based learning has become more common, researchers know less about the most effective way to implement technology in learning. On a similar research path, Manuel and Schunke's (2016) study recognized that college instructors' use of social media to communicate course content is commendable and necessary and computer-mediated communication, including social media, are changing quickly. However, the essential questions remain unchanged, establishing the idea that there is still no

replacement for instructors themselves. Gonzalez et al.'s (2013) study specified that the access of virtual classrooms and electronic environments is currently being used around the world, yet the question still lingers between the use of technology and whether it enhances and enriches learning. Carrascosa et al.'s study (2015) found that technology utilized to its fullest potential, it will connect students from different backgrounds and cultures, encourage students to take risks and learn through practiced attempts, and increase the differentiation necessary to reach each student. Gupta and Irwin (2016) also argue that goal-irrelevant social media site uses may be selected based on strategic settings, specially, purposefully deployed to social media sites like Facebook if aligned with the learning goals.

Furthermore, Barber, Taylor, and Buchanan's (2013) study addresed the importance of integrating online learning within student interactions in order to increase authentic learning, observing that tools available online reflected the familiar learning that arises in a direct setting. In a direct setting, this might not have happened as the teacher would not overhear all sides of the conversations. Throughout the class, learners became new, shared new and monumental events in their day-to-day lives despite being in places across the world. Therefore, via the use of digital instants, students and faculty revealed their special and sensitive lives; they established authentic contacts. Barber et al. (2013) describe this as the creation of individual expert real-world knowledge.

Instructors in online settings should not underrate the significance of capitalizing in community developing activities, much as they might do in a direct atmosphere; in the online atmosphere, this is a virtual, and generally inactive learning environment, thus preserving learners' mental-prepared stance is vital to preserving their participation and

on engrossment. Furthermore, learners moving toward college are a fraction of the millennial generation, being affected by a nation where the relationship amongst social and electrical domains is ever hazier (Dyson, Vickers, Turtle, Cowan, & Tassone, 2015). Likewise, pervasive for learners is the utilization of social media and how it has started to scatter within the classroom. Familiar examinations recommend that learners are not giving the sort of captivated attention that perhaps we once expected (Dyson et al., 2015). More exactly, they are online in class, retrieving email, media, and shopping sites, YouTube, and additional social media sites like Twitter and Facebook.

Research corroborates the knowledge that such scientific accessibility is not advantageous for the classroom, unless that technology channeled into something specifically for the classroom by utilizing students' awareness with social media sites by integrating them into lessons and those lessons act as an effort to functionalize and assess how this could be completed (Dyson et al., 2015). Learning can be meaningful when employed in an authentic situation. The use of additional materials like online social media as an authentic interest for learners to participate while learning using mobile devices to create authentic substance for learning is the most sensible path for modern students (Chen, Wang, Yang, Lu, & Chang, 2013). If instructors want students to be engaged and informed global citizens, they need to know how to use social media effectively. Social media is becoming a significant basis of information about global events, particularly movements and events that are not covered by traditional media sources (Hawkins, 2015). Because of this phenomenon, if instructors want their students to have access to information from nontraditional sources, they must be sure that students have the skills to find that information.

Social media use at the university is becoming more common. For example, in one study, data were gathered by means of an online questionnaire, filled in by 333 teachers in higher education that questioned social media usage in instruction (Gruzd, Haythornthwaite, Paulin, Gilbert, & del Valle, 2018). Results exhibited that social media employed in higher education instruction resulted in three probable motives for teachers to utilize social media: (1) exposing learners to routines, (2) expanding the array of the education atmosphere, and (3) encouraging learning because of social communication and teamwork. Most teachers enthusiastically utilize social media for professional and personal objectives and more and more in teaching habits, using social media to collect evidence, work together, interact, and distribute data (Gruzd et al., 2018). In another survey conducted in 2014, 97% of 711 instructors utilized social media as some of their educational study for purposes such as individual network expansion, self-promotion, study, teaching, and assistance (Gruzd et al., 2018). Another similar survey conducted in 2013 found that of 8000 US faculty, 55% of faculty use social media at least monthly for professional reasons, with 41% utilizing social media in education (Gruzd et al., 2018). Overall, instructors are including social media in their professional lives, but may not be including it in their instruction or classroom setting.

The progress of Twitter and parallel sites has affected countless organizations. Numerous employers, for instance, presently prize digital knowledge and attempt to employ workers who are acquainted with social media (Morgan, 2014). Since companies more and more desire this type of knowledge, researchers like Morgan (2014) maintain that instructors need to act by supporting student development when utilizing social networking and microblogging effectively. Once stimulated to tweet on different

subjects, learners can expand their knowledge abilities in many ways. Such as, tweeting improved students' skills in writing and reading, inspires learners to do better work, since they have to circulate their work for authentic listeners, produces occasions for learners to vent, and stimulates learners to interact realistically (Morgan, 2014). Scientific developments are unlimited, but instructors faced a conundrum. Instructors are locked in traditional instruction strategies and are hesitant or unable to alter their teaching methods; thus, learners are turning into fatalities of not being suitably educated for the environment outside the schoolroom (McMeans, 2015). Students use their mobile devices and social media even when within the borders of the classroom, despite the need for absolute attention on the instructor and the lesson (McMeans, 2015). It makes sense to use those social media outlets as a means to reach students. The more current examination has revealed that social media has become an enabler for cooperative education when entrenched in a learning setting and that these online technologies are significant instruments for education and innovation (Yeen-Ju & Mai, 2016). Social media is a simple path to address a shifting pattern of new generation of the student on an interactive platform for instructors to create innovative means to provide varied ways of interacting and opportunities for collaboration (Rezaei & Ritter, 2018). This interaction allows teachers to maintain student interest and allow students to communicate on multiple levels. Social media also allows students to join in the learning progression by encouraging students to take accountability for their own education, operate on current criticism, and retrieve personalized. The latest information with 24-hour accessibility for each student, enabling them to determine the valid from invalid sources and learn from one source to another what a credited source looks like (El Rayess, Chebl, Mhanna, &

Hage, 2018). All of the elements of social media benefit the students' needs as a diverse learner. The aim of Yeen-Ju and Mai's (2016) research was to examine the utilization of online technologies in an authentic educational atmosphere and the end product of nurturing cooperative problem-solving amid students.

Facebook as an Instructional Tool

Since Facebook's conception, instructors have tried using social media tools for instructional purposes; however, there is evidence of both negative and positive characteristics of integrating social media into the higher education curriculum composition. According to Pew Research Center, 65% of adults now use media sites (Kilis, Gülbahar, & Rapp, 2016; Njoroge, 2016). Based on different corporations' statistics in July 2011, Facebook passed 1.74 billion monthly users by June 30, 2016 (Kilis et al., 2016; Njoroge, 2016). Facebook, with 94% internet users, is the most popular social media in the US and world, with 1.35 billion users (Rezaei & Ritter, 2018). Social media websites are gradually developing the settings that aid and mirror how young learners build, communicate, and contribute in the creation of their social realities for and with other learners (Hunter & Caraway, 2014). In principle, young learners using social networking sites immerse themselves in essential methods of informal instruction and learning. However, they are also useful in more formal teaching and learning when Facebook is used with undergraduate students as a way to remain current by providing up-to-the-minute notices of commencement programs, homecoming events, and live study sessions as well as campus emergency alerts, making them feel more a part of the campus community and the student body (Gonzalez et al., 2013).

However, how students use social media for themselves and how they use it when asked to for educational purposes, differs. Dalsgaard's (2016) empirical study showed how participants' utilization of student-supervised groups varies from their utilization of instruction-supervised instruments, for example, LMS. The data included evaluation of 3139 posts and 15,018 responses within five Facebook groups, and a questionnaire with 1463 student and 148 instructor responses and the final results of the research reveal that although LMS remained chiefly formal learning systems of the instructor, Facebook groups have an instructive possibility when utilized by learners for one-on-one learning (Dalsgaard, 2016). Facebook is, in essence, a site for communication and social networking. Since the main reason for people's Facebook use relates to maintaining communication with friends and family, it makes sense to study the educational role of Facebook in relation to socialization and collaboration. A number of current studies have investigated Facebook being used deliberately as a LMS when managed by instructors, and in addition, researchers have studied the use of Facebook groups organized by the institution and with participation from both instructors and students, found that Facebook groups can be employed as a LMS (Arteaga Sánchez et al., 2014; Dalsgaard, 2016; Lasker & Vicneswararajah, 2015; Sandlin & Peña, 2014; Sarapin & Morris, 2015). When instructor created and monitored, the Facebook LMS is more successful as an instructional tool.

Even though Facebook has been deemed by learners as a group technology more than a traditional instruction tool, it can have a significant impact on student's engagement and interest (Arteaga Sánchez et al., 2014; Lasker & Vicneswararajah, 2015; Sandlin & Peña, 2014; Sarapin & Morris, 2015). Social media tools have been shown to

increase engagement and to make students feel empowered, which translated into improved perception preservation, class satisfaction, and academic success (Jacquemin, Smelser, & Bernot, 2014). Social media sites like Facebook provide one avenue for challenging educational inequities and navigating composition classrooms, supporting college readiness and access of students, particularly low-income youth from traditionally marginalized backgrounds who aspire to be the first in their families to graduate high school and enroll in college (Marciano, 2015). The level of equality among students in a Facebook setting allows for a better perception of students. Social media websites, for instance, Facebook, govern university students' private lives and have developed into helpful means for sustaining personal contacts, swapping information, and supplying entertainment, rendering them valuable to instructors trying to reach their students (Camus, Hurt, Larson, & Prevost, 2016). Students are also more likely to participate in online social networking because of the numerous benefits it provides. Since many online discussions set up in Facebook take place both synchronously and asynchronously, learners are permitted to form their replies before contributing, which intensifies the ease of communication, thus further developing a solid sense of community among classmates (Camus et al., 2016). Online dialogue contribution from students has a positive correlation with course learning and performance. Scholars discovered that effective communication between instructors and learners has positive effects on learner educational accomplishment (Kim et al., 2015). The advanced educational accomplishment described in lectures as communication between the instructor and the learners, as opposed to traditional lectures where learners just passively attended to the instructor's words. As an added advantage, online dialogue forums on Facebook permit

instructors to make a learning place outside of the traditional schoolroom with minimum exertion (Camus et al., 2016).

Twitter as an Instructional Tool

Twitter has also been shown to be an effective instructional tool. The online pages establish themselves so that learners can click to follow others. Instructors can tweet or post about impending course work and due dates (McMeans, 2015). A 240-word count restricts Twitter, so learners can utilize this aspect to submit stories or short poems (McMeans, 2015). Twitter reported 1.6 billion quest inquiries each day in 2011 and, in 2018, it had more than 310 million monthly active users; the second most popular social media in the world, there are 500 million Tweets sent per day (Casassa, Cappello, Bedau, & Cirino, 2018; Rezaei & Ritter, 2018). Censuses reveal facts, and the statistics gathered can be utilized in class (McMeans, 2015). Debates, school calendar events, inquiry and responses, images, notices, and more can all be posted using Twitter (McMeans, 2015). When users establish an account, users can elect to follow individuals or associations, which then follows that they will view every tweet sent by those individuals or associations. Correspondingly, users can tweet, and that tweet will be viewed by anyone who has selected to follow them, creating a connected environment in which to learn and interact, all of which is a key component in an authentic learning environment. What divides Twitter from other social networking platforms, like Facebook, is its hashtag purpose. After every tweet, participants can key in a hashtag, which is a phrase or word preceded by a pound sign, such as #research. If participants conduct a quest for a precise hashtag, they will get every tweet that encompasses that hashtag regardless of whether or not they are following those people. It remains this hashtag utility that brands Twitter a

social media platform outlined not only by following specific people but correspondingly by connecting shared ideology and interests which is subject-specific (Casassa et al., 2018). This blend of hashtags and tweets generates an exceptional form of communiqué that has developed into a novel learning method (Journell, Ayers, & Walker Beeson, 2014).

Twitter has developed into a vital method to dispense information and presents a uninhibited means to spread a communication that will stretch through society in the fastest mode conceivable (Journell et al., 2014; Casassa et al., 2018). One qualitative study conducted by Casassa et al. (2018), offered an examination of how the utilization of social media can afford chances for learners to analytically examine multifaceted content and work together with others. The learners participated as active spectators at a dramatic recital of Gertrude Stein's *Doctor Faustus Lights the Lights* at a big urban college. The performances comprised of learner sharing in a live Twitter feed (Casassa et al., 2018). The data from this study included observations and the collection of Tweets. The most relevant results signified that the use of social media provided learners the chance to participate in an artistic demonstration, collaboration with other learners, generate a perception of community, dynamically participate within fine art, and relate multifaceted content to everyday life (Casassa et al., 2018). The results from this study aligned with the elements of authentic learning, in particular with element numbers one "provide authentic context that reflects the way the knowledge will be used in real-life;" "two provide authentic activities;" "five support collaborative construction of knowledge;" "six promote reflection;" and "seven promote articulation, providing the student participants in this study with an authentic learning experience because of social media"

(Herrington & Oliver, 2000, p. 4). The literature found supports the importance of social media like Twitter in the classroom setting, because of the kinds of material students are encountering regularly. Particularly contained by social media, images like photographs, graphs, and digital art like emoticons, memes, and GIFs interrelate with words to share concepts and opinions (Casassa et al., 2018). Indeed, when instructors assume and adjust learner-centered instruments like social media and Twitter, learners are more likely to get involved in their learning.

Classroom Twitter use has also been shown to influence a sense of belonging. In Friess and Lam's (2018) research, learners utilized Twitter to conclude coursework once every two weeks as a means to advance a feeling of fitting in, which is a crucial element in authentic learning. Researchers explored how this Twitter interference touched learners' perception of fitting in, their formation of an online society, and their continuous search of technical interaction within their learning with the outcome being that participants stated statistically substantial benefits in their perception of fitting in and connectedness as compared to previous occurrences (Friess & Lam, 2018). Collectively, these studies show that learners' and instructors' disinclination to participate in academically using social media might have to do with a common want of know-how in the utilization of social media (Friess & Lam, 2018). In order to learn to utilize the tools in various approaches for diverse reasons and try continued directed reflection and practice on what worked and what did not, students require training.

Student Perceptions of Social Networking in Education

Student perceptions of online learning are key to student success in student learning, and the research in this section indicates that the majority of students prefer an

online learning environment or the opportunity to learn online when possible. Overall, research indicates that students in an undergraduate setting prefer the option of online social networks as modes of instruction, communication, and collaboration (Dahlstrom & Bichsel, 2014; Lasker & Vicneswararajah, 2015; Noel-Levitz, 2013; Sandlin & Peña, 2014). In Tur et al.'s (2017) mixed-method study, participants were teaching students who utilized Twitter as a fraction of the essential assignments and data were collected via a survey and reflective written text regarding students' perceptions of the utilization of Twitter as a teaching device. The results overall were positively shown. However, one group of participants felt that a lengthier and more prolonged utilization of Twitter was more beneficial concerning Twitter's instructive significance, while the other group of participants saw worth in the utilization of Twitter to seek out and reveal information (Tur et al., 2017). Researchers Tur et al. (2017) have examined four possible uses of Twitter in the classroom setting: traditional and nontraditional education community, cooperative learning, mobile device learning, and reflective thinking, all of which have been supported by the literature in this study (Casassa et al., 2018; Dahlstrom & Bichsel, 2014; Dalsgaard, 2016; Friess & Lam, 2018; Journell et al., 2014; Lasker & Vicneswararajah, 2015; Sandlin & Peña, 2014). Technology has essentially altered the means postsecondary institutes communicate and interact with learners, and one of the initial modes in which undergraduate learners interact with postsecondary institutes is via social media (Sandlin & Peña, 2014). Noel-Levitz (2013) conducted a survey that showed 48% of 18 - 22 learners favor a site that connects with them through emails, social media, and texts. Students' perceptions indicate that college students are willing or even prefer,

to communicate via social media and at times, prefer it and it is current, supporting the need for further research in this field.

Connectedness is another reason college students like using social media for learning. Dahlstrom and Bichsel's (2014) study discovered that the bulk of undergraduates confirmed that technology allows them to feel more united to other learners (51%), their teachers (54%), and their institute (65%). Social networking allows students to collaborate and work together via online social networking sites. Receiving high-quality instruction while balancing personal commitments raises problems that students commonly experience within their realities (Lasker & Vicneswararajah, 2015). Additionally, students function in a cultural setting where social networking sites such as Tumblr, Facebook, and Instagram have developed into the live environments where they show evidence and concepts, launch solidarity or disputes, and share discussions and viewpoints from the inventive to the routine, with Twitter remaining singled out as a crucial application for probable incorporation into learning (Lasker & Vicneswararajah, 2015). Specifically, 64% undergraduates observed social media as more suitable than outdated college online elements such as Blackboard (Jacquemin et al., 2014). In addition, Facebook is the most heavily adopted social networking site, with 85% of social media users (Arteaga Sánchez et al., 2014). This research suggests that students today are digital citizens or representatives of the Net Generation; as a result, it is essential to progress from an outdated instructor-centered style to education, where the instructor communicates information to learners, to a learner-centered style, where the learner, rather than absorbing information conveyed by the instructor, acquires how to learn. Another study examined the bond between 271 undergraduate learners' perceived

learning atmosphere and their immersion in activities unconnected to course assignments through social media and its connection to student achievement (Alt, 2017). The results showed that an adverse coefficient outcome between the perception of the educational atmosphere as constructivist and social media engagement concepts; however, social media engagement could be utilized in educational situations to support student commitment and make possible improved student learning. Student openness to diversity and trial also remained positively connected to both variables. The information from this study supported the importance of social media when utilized as an instructional device. Today's students' emphasis on social relations and prefer group-established, instead of traditional lecture-based, methods to education and prefer collaborative practices that display transparent objectives, improve incentive, and include authentic learning activities (Alt, 2017). Many of these elements are present in a social media scenario, of which most students are found to prefer.

A large number of studies, Sánchez's et al. (2014) among them, determined that undergraduates commonly deem Facebook and Twitter as social tools that can actually benefit their shift into university life, indicating that for the most part, student's positively and openly perceive the utilization of social networking sites for instructional resolutions. In addition, Lasker and Vicneswararajah (2015) found that students using Twitter and Facebook considered their student–tutor relationships to have profited from the online account, with tutors thought of as more friendly both in online and in person. Furthermore, what is perceived to be authentic instruction by students is significant because the information described in social media outlets can outline learner anticipations about university campus life, practices, and culture. When learners' anticipations are

satisfied, they positively influence the learners' social and academic incorporation, and, as a result, foster the learners' academic obligation and positively influences determination (Sandlin & Peña, 2014). Zheng, Dreon, Wang, and Wang (2018) examined 505 college students' perceptions of tailored education with social media in higher education. Participants received survey feedback form on social media and researchers used factor analysis to evaluate the data (Zheng et al., 2018). Findings indicated that despite learners with different cognitive styles or different cognitive behaviors in technology-enriched environments, students perceived the use of social media as critical to their learning (Zheng et al., 2018). In other words, students found social media beneficial to their learning because of its ability to allow them to learn as individuals and collaboratively when it suited them.

Innovative methods of learning and instructing brought into action via the launch of social media can be perceived to have enhanced the progress of skills such as an improved grasp of a topic, communication, and automatic exercises via mediums like student blogs, all of which are directly from the students' view and contain the students' opinion of things (Cooke, 2017). Both Cooke's (2017) and Jacquemin et al. (2014) studied participants' perceptions of social media when utilized as an instructional tool in a classroom setting, the first study is a mixed methods and the latter a qualitative case study. Students shared that the benefits were the upsurge in communication through an application where students can become dynamically immersed in their education, according to student perceptions (Jacquemin et al., 2014). In addition, the adoption of social media as a platform used by both staff and students, can be understood to assist in the removal of the 'cold and impersonal study environment' which is likely to occur

when staff and students are uninspired or disengaged from the educational process (Cooke, 2017, p. 257). According to student perceptions, adverse features of social media in the academic world have are present as data inundation, lack of attention, student individuality administration problems, and unprofessional relations. However, the research done by Jacquemin et al. (2014) emphasized the overall benefits to student perceptions when increasing interaction between faculty and students, as optimistic when using social networking sites as instructional tools. The student participants in the study implied that the greater part, 64% undergraduates, 75% graduates, regarded social media as more convenient than conventional college online elements like Blackboard for online discourse and the graduate student cohort implied that 75% of students were involved in integrating Twitter into a class (Jacquemin et al., 2014). Whereas technology is a device for the classroom, the use of technology to recognize and share digital instances can be an efficient stratagem to convey people to the online learning environment. Observations made indicate that the connection amid instructor and student is an imperative component, to both parties, in online education that cannot be traded with high tech tools, all of which is supported by research on student perceptions of online social media (Barber et al., 2013). The implementation of online learning to share personal anecdotes and options allows students the opportunity to grow as a whole, sharing their emotions and showing empathy with one another. Instructors who embrace the opportunity in order to garner more student cooperation, trust, and willingness to work together, infusing their students with courage and conviction, are more likely to gain student interest in the current content (Barber et al., 2013). However, Jacquemin et al.'s (2014) survey questions directed to faculty discovered that 76% of instructors do not utilize social

media in the schoolroom and were either uncertain (31%) or unwilling (56%) to integrate it into their content, despite the effect that social media has on student perceptions and authentic learning. The effect of positive interactions is a positive perception from students, because the inclusion of social media will intensify the bearing of classroom education with fresh age groups by connecting to newer and "increasingly electronic centered learners" (Jacquemin et al., 2014, p. 22). Research has shown that in order for students to become absorbed in a particular subject, it is imperative to stimulate previous information and start with something that is of importance to them, and it is accurate to suppose that social media supports in triggering previous knowledge in addition to triggering a curiosity within students (McMeans, 2015). Social media encourages teamwork, inventiveness, and classroom dialogue amongst students. Students are working together with each other with both oral communication, but similarly in written word. Teamwork will blaze the trail to conversation, which will proceed to inventive thinking. By significantly engrossing students, teachers are supporting them with critical exchanges considered required to perform in the technological setting that waits outside the classroom setting (McMeans, 2015).

Summary and Conclusions

The literature review authentic learning, online social networking as an instructional tool and student perceptions of social networking in education revealed the possibility of a compelling relationship between the use of social media as an instructional tool and students' perceptions of their authentic learning. Research related to social media use in education has been done with elementary students (Wohleb et al., 2018), high school students (Wohleb et al., 2018), and undergraduate and graduate

students (Barber et al., 2013; Casassa et al., 2018; Jacquemin et al., 2014). However, there is limited research on the population of undergraduate students. It also revealed no known studies focused on graduate students within the English 101/102 composition classroom. Authentic learning has been studied in relation to how its used with social media like Twitter and Facebook (Journell et al., 2014; Casassa et al., 2018), and how students perceive their authentic learning is progressing or to what degree their authentic learning has been benefited by various tools (Cooke, 2017; Zheng et al., 2018), but has not been studied with the necessary complexity into learning, according to the nine elements of authentic learning, with this specific undergraduate age group or with a composition classroom setting utilizing Facebook and Twitter as instructional tools. This study was designed to build upon the body of literature focused on students using social media as instructional tools in their authentic learning, on the literature focused on instructors utilizing social media as instructional tools in their authentic learning classroom, and on the literature expanding the area of authentic learning studies in general. Chapter 3 includes the research design and rationale, the research question, recruitment for this study, participation and data collection procedures, and data analysis plan. The quantitative study was designed to understand how students perceive their authentic learning while using social media as an instructional tool

Chapter 3: Research Method

Introduction

The purpose of my quantitative study was to determine the perceptions of undergraduate first-year freshmen composition students across nine elements of authentic learning using social media as instructional tools. In Chapter 1, I presented an introduction to the study. In Chapter 2, I provided an overview of the literature reviewed concerning authentic learning, online social networking as instructional tools, and student perceptions of social networking used as an instructional tool.

In Chapter 3, I will describe the research design and rationale, my role as a researcher of the authentic learning environment of a south eastern university and students' perceptions of their authentic learning when social media used as instructional tools. I designed the quantitative research question to understand how students perceive their authentic learning while using social media as an instructional tool, all of which was measured using the instrument developed by Bozalek et al., (2013); Bozalek and Watters (2014); and Herrington and Oliver (2000) and adapted by me with their permission (see Appendix). The Chapter 3 methodology section includes population, sampling procedures, procedures for recruitment, participation, and data collection, instrumentation and operationalization of constructs, and the data analysis plan. Next, I will discuss threats to the validity of quantitative data, as well as ethical procedures for conducting research, and will conclude this chapter with a summary.

Research Design and Rationale

For my study, I used two first-year undergraduate freshman composition courses with students at a public university in a large south eastern university in the United

States. To collect data on the variables, student perceptions of authentic learning and the use of Facebook/Twitter as instructional tools, I modified a survey first developed by Bozalek et al. (2013); Bozalek and Watters (2014); based on a framework developed by Herrington and Oliver (2000). In Bozalek et al. (2013), Bozalek and Watters (2014), and Herrington and Oliver's (2000) research-developed survey, students responded to a Likert-type scale to assess perceptions of authentic learning according to the nine elements previously mentioned. To analyze my data, I used a Pearson product correlation, which does not take into consideration whether a variable classifies as a dependent or independent variable (see Frankfort-Nachmias & Nachmias, 2015), all variables are equal and linear.

For my study, I focused on undergraduate freshmen composition students and their authentic learning when engaged with Facebook and/or Twitter. I required a population fitting the subject; college freshmen in an English 101 or 102 class were the ideal populations for my study. I utilized the population from the public university in a large tier one research university in the south eastern United States. The educational setting was similar in curriculum demands, teaching methods, and core courses offered from other university and college settings. The university was similar in curriculum demands, teaching methods, and core courses offered when compared to other four-year public institutions in the United States.

For my study, I utilized a nonprobability sample design because I used intact classes. The use of nonprobability sample design showed that the number of students who have utilized social networking for their authentic learning was not discernible at the outset of my study. Purposive samples or judgment samples, a form of nonprobability

sample design, are used when researchers must use their best judgment and choose the best possible representation of the population participating in the study (Frankfort-Nachmias, & Nachmias, 2015). Data from the Perceptions of Authentic Learning Survey showed how students rated their authentic learning according to the nine elements of authentic learning. I wanted to determine whether there was a significant relationship between using Facebook and/or Twitter as instructional tools and the students' perceptions of authentic learning using the Pearson product correlation statistic.

RQ1: For undergraduate freshman composition students using social media (i.e., Facebook and Twitter) as instructional tools, what relationships exist across student perceptions of the nine elements of authentic learning? The nine elements of authentic learning include:

> 1) Provide authentic context that reflects the way the knowledge will be used in real-life; 2) Provide authentic activities; 3) Provide access to expert performances and the modeling of processes; 4) Provide multiple roles and perspectives; 5) Support collaborative construction of knowledge; 6) Promote reflection; 7) Promote articulation; 8) Provide coaching and scaffolding; and 9) Provide for authentic assessment of learning within the tasks (Herrington & Oliver, 2000, p.4).

H_0: There are no statistically significant relationships across perceptions of the nine elements of authentic learning.

H_1: There are statistically significant relationships across perceptions of the nine elements of authentic learning.

Methodology

In the next sections, I lay out detailed descriptions of the different aspects of my study design. The Institutional Review Board number for this study was 05-07-18-0447126. In this section, I will discuss population, sampling, recruitment, instrumentation, operationalization of the variables and data analysis.

Population

The target population for my study was undergraduate freshman composition students enrolled in an English 101/ 102 class at a public university in a large urban Southern university in the United States. The setting was appropriate for my study because of its curriculum demands, teaching methods, and core courses offered. There were approximately 21,883 undergraduate students attending the university, of which approximately 3,435 were freshmen students. My study focused on freshmen composition students. I chose this particular population because they were in a classroom setting that uses Facebook and/or Twitter as an instructional tool.

Sampling and Sampling Procedures

For my study, I utilized a nonprobability sample design in order to utilize the best possible representation of the population of the undergraduate freshmen students I was studying. Purposive samples or judgment samples, a form of nonprobability sample design, are used when researchers must use their best judgment and choose the best possible representation of the population participating in the study (Frankfort-Nachmias & Nachmias, 2015). For my study, the best possible scenario for accurate sample design was to use purposive samples from the population of approximately 3,435 undergraduate freshmen students. In order to determine my sample size, I used a power analysis

generator G-power calculator online. After calculating for the best possible effect size for a Pearson production correlation with .5 significance, an alpha level .05 of significance, and power level of .80 in order to get the closest probability without error, the best sample size was 23 (see Heinrich-Heine-Universität Düsseldorf, n.d.).

For my study, the best possible scenario for accurate sample design was to use a purposive sample from the different sections of undergraduate first-year freshmen composition students. Participants in this study were English 101/102 students enrolled at a large university in the south eastern United States. Several English 101/102 courses at this university required students to take part in an online setting to obtain a minor percentage of course credit. For my study, participants needed to be 18 years of age or older, to have access to the Internet, and be a present university student, and a current English 101/102 student. Students who did not meet this requirement did not participate in this study. University instructors contacted their students and asked students to complete the survey via a link at any time and at their convenience anonymously.

There were typically 8 to 12 sections of English 101/ 102 offered during the semester, each of which enrolled an average of 23 students per class. All students shared some common characteristics (age group, level of college experience, academic placement, and utilization of social networking sites for instruction) in these classes. In order to obtain this sample, I used a demographic survey, ensuring the participants' privacy through anonymity, all of which are a part of the survey. I utilized a survey, as adapted with permission from Herrington and Oliver, (2000), that addressed the type of authentic learning observed, and the students' perceptions of that authentic learning when social media used as an instructional tool.

Procedures for Recruitment, Participation, and Data Collection

Recruitment. I sought approval for this study from the Walden University Institutional Review Board. After approval, I included written information introducing the study and emailed it to the head of the English department at the study site. In order to give participants access to the survey, I contacted the head of the English department directly via emails and phone calls. Through this direct communication, I provided the head of the English department an email with the digital invitation and the link to my consent form/survey. This tool measured the level of authentic learning perceived to be taking place in the instructional setting when students used social media . The English department head passed it along to English 101/102 instructors in his department at the study site in the Southern university, all of which took about five weeks to. At no point did I have contact with any English 101/102 instructors or study participants. The recruitment of participants took about two months altogether, one month in the fall semester and one month in the spring semester.

Participation. Instructors gave student participants the link to the consent form/survey,housed on SurveyMonkey.com. Students who agreed to take this survey were undergraduate students at this institution who had voluntarily agreed to be part of this specific study. Students were invited to participate in the study by using the link within the website listed on the invitations provided by their instructors that led them to the survey. Students were invited to participate in the study by using the link on the invitation that led them to the survey. Once they reached the SurveyMonkey.com website, participants were asked to read and electronically provide informed consent. The informed consent document contained background information on the study, procedures

of the study, and information regarding confidentiality. Also, included in the document were a statement regarding the voluntary nature of the study and a discussion of ethical considerations. An email address was provided to participants so that they could contact me with any additional concerns or questions. Once participants electronically provided informed consent, they were taken to the survey. Students were asked to rate their authentic learning according to the nine elements of authentic learning on a Likert-type scale, 1 being the highest and 5 being the lowest. The recruitment of participants took about two months altogether, one month in the fall semester of 2018, in which I gained 35 participants, and one month in the spring semester, in which I gained 15 participants, giving me a total of 50 participants for my study. Upon completion of the survey, participants were thanked for their time and for taking the survey.

Data Collection. All the data from those who took the survey were saved and sent to me via the Internet. Data were collected online by SurveyMonkey.com using the tool, Perceptions of Authentic Learning, originally developed by Herrington and Oliver, (2000), and adapted with their permission. The tool has 41 questions about authentic learning divided into nine subcategories that aligned into the nine elements of authentic learning and a six question demographic survey (gender, age, which social media students' use, how often do students check Twitter, how often do students check Facebook, and how many hours do students spend on the internet). Altogether, the survey took 10 to 15 minutes for students to complete. All survey responses were collected, stored, and available to me through SurveyMonkey.com; I sorted data into the nine elements on the website. I kept all data on the website and on password protected

computer. After two months of collecting data from participants, I used the Pearson product correlation to analyze the data.

Instrumentation and Operationalization of Constructs

Instrumentation. The instrument was based on Herrington and Oliver's (2000) *nine elements of authentic learning* framework and then further developed by others (Bozalek et al., 2013; Bozalek & Watters, 2014). I modified the instrument used by Bozalek et al., (2013) with Herrington and Oliver's permission (see Appendix) to measure authentic learning occurring strictly online using social media. The survey directed all questions towards the authentic learning taking place on and through social media outlets like Facebook and/or Twitter. Bozalek et al.'s (2013) survey used it with validity and reliability. Other studies, Dyson et al. (2015), Zheng et al., (2018), and Jacquemin et al. (2014) used a similar instrument to test authentic learning. Bozalek et al. (2013) examined the amount of and level of authentic learning that took place in the instructional setting. Herrington and colleagues conducted a number of research studies exploring theories to use in technology-mediated instruction (Bozalek et al., 2013; Bozalek & Watters, 2014; Herrington & Oliver, 2000; Herrington & Herrington, 2006; Herrington & Kervin, 2007; Herrington, Oliver, & Reeves, 2003) leading up to the development of a quantitative instrument utilized in a number of studies. The framework developed by Herrington and Oliver (2000) and subsequent instrument developed and used by Bozalek et al. (2013) and Bozalek and Watters, 2014 addresses the nine elements of authentic learning, specifically asking participants to weigh their experiences in learning using the nine elements of authentic learning as requirements of true authentic learning.

Operationalization of the Variables. The key variables of interest within this study were authentic learning, social media or online social networking, and student perceptions. A concise explanation dedicated to how these key variables operationalized within this study is in the following sections. This explanation includes how the variable was measured or manipulated including an example item from the tests used; how the variable was calculated; and what the resulting scores represent. The first variable, student perceptions of authentic learning, and the second variable, the use of Facebook/Twitter as instructional tools was measured by the survey of authentic learning modified from Bozalek et al. 2013; and Bozalek and Watters (2014), a tool previously validated and used with permission.

Authentic learning. The key focus of this study was determining students' perceptions of their authentic learning when social media is present as an instructional tool. Authentic learning was operationally defined as the ability to engage in academic pursuits that are characterized by relevant, deep and rigorous academic inquiry, and knowledge production and characterized by nine specific elements (Bozalek et al., 2013; Bozalek & Watters, 2014; and Herrington & Oliver, 2000). I collected data via an online survey of 41 questions divided into those nine elements or subcategories of authentic learning. Likert-type questions were used to ask students to assess their authentic learning. The survey specifically addressed all nine elements, so participants were asked questions about collaboration, for example: *Are students able to collaborate (rather than simply co-operate) on tasks?* This variable is tied into the students' perceptions and therefore, did make a great deal of quantitative differences. I entered these categories into SPSS as an individual variable for each element and subcategory of each element

(Learning Element 1, Learning Element 1a, Learning Element 1b, Learning Element 2, and so on).

Element 1: “Provide authentic contexts that reflect the way the knowledge will be used in real life” (Herrington & Oliver, 2000, p. 4). The survey specifically addressed all nine elements, so participants were asked questions about real-life content application, for example: *You are able to transfer skills or knowledge from Facebook/Twitter to other areas in an authentic manner.*

Element 2: “Provide authentic tasks and activities” (Herrington & Oliver, 2000, p. 4). The survey specifically addressed all nine elements, so participants were asked questions about real-life content application, for example: *The tasks you perform in English 101/102 mirror those you do on Facebook/ Twitter.*

Element 3: “Provide access to expert performances and the modeling of processes” (Herrington & Oliver, 2000, p. 4). The survey specifically addressed all nine elements, so participants were asked questions about real-life content application, for example: *Your Facebook/ Twitter pages provide access to expert skill and opinion.*

Element 4: “Provide multiple roles and perspectives” (Herrington & Oliver, 2000, p. 4). The survey specifically addressed all nine elements, so participants were asked questions about real-life content application, for example: *On your Facebook/ Twitter pages, you are able to explore issues from different points of view.*

Element 5: “Support collaborative construction of knowledge” (Herrington & Oliver, 2000, p. 4). The survey specifically addressed all nine elements, so participants were asked questions about real-life content application, for example: *On your Facebook/ Twitter pages, you are able to collaborate (rather than simply co-operate) on tasks.*

Element 6: “Promote reflection to enable abstractions to be formed” (Herrington & Oliver, 2000, p. 4). The survey specifically addressed all nine elements, so participants were asked questions about real-life content application, for example: *In your English 101/102 classroom and Facebook/ Twitter pages, you are able to move freely in the environment and return to any page upon reflection.*

Element 7: “Promote articulation to enable tacit knowledge to be made explicit” (Herrington & Oliver, 2000, p. 4). The survey specifically addressed all nine elements, so participants were asked questions about real-life content application, for example: *You complete tasks on Facebook/ Twitter that enable groups and forums the chance to discuss ideas.*

Element 8: “Provide coaching and scaffolding by the teacher at critical times” (Herrington & Oliver, 2000, p. 4). The survey specifically addressed all nine elements, so participants were asked questions about real-life content application, for example: *Your English 101/102 instructor is available to provide contextualized support on social media outlets like Facebook/ Twitter.*

Element 9: “Provide for authentic assessment of learning within the tasks” (Herrington & Oliver, 2000, p. 4). The survey specifically addressed all nine elements, so participants were asked questions about real-life content application, for example: *You are assessed on the result of the learning process while on Facebook/ Twitter, instead of separate tests for the sake of testing.*

Social media or online social networking. The key focus of this study was determining students’ perceptions of their authentic learning when using social media as an instructional tool. Social media or online social networking was operationally defined

as any method of electronic communiqué (for example websites for social networking and microblogging) by means of which students produce online groups to share ideas, information, personal messages, and other content (such as videos) (Carrascosa et al., 2015).

Student perceptions. Student perceptions operationally defined as students' thoughts and beliefs about certain components of a course or content in a course and the quality of their learning (Dahlstrom & Bichsel, 2014; Lasker & Vicneswararajah, 2015; Noel-Levitz 2013; Sandlin & Peña, 2014). When completing the survey, participants rated their perceptions of their authentic learning when using social media or online social networking as an instructional tool on a Likert-type scale rating their disagreement or agreement using a 5-point scale (1 = not at all true, 2 = rarely, 3 = sometimes, 4 = often, 5 = very true).

Data Analysis Plan. I collected data via digital surveys on SurveyMonkey.com. The survey I used originated from a tool developed by Bozalek et al., (2013); Bozalek and Watters, (2014); and Herrington and Oliver (2000) and was adapted with their permission (see Appendixe), and was used by other researchers, such as, Bozalek et al. (2013), examining the amount of and level of authentic learning that took place in the instructional setting to test a hypothesis related to authentic learning. All data for this study were analyzed using SPSS 25.0 for PC. There was only one research question examined in this study. The research question is presented below, along with the corresponding hypotheses and an explanation of the data analysis.

RQ1: For undergraduate freshman composition students using social media (i.e., Facebook and Twitter) as instructional tools, what relationships exist across student

perceptions of the nine elements of authentic learning? The nine elements of authentic learning include:

> 1) Provide authentic context that reflects the way the knowledge will be used in real-life; 2) Provide authentic activities; 3) Provide access to expert performances and the modeling of processes; 4) Provide multiple roles and perspectives; 5) Support collaborative construction of knowledge; 6) Promote reflection; 7) Promote articulation; 8) Provide coaching and scaffolding; and 9) Provide for authentic assessment of learning within the tasks (Herrington & Oliver, 2000, p.4).

H_0: There are no statistically significant relationships across perceptions of the nine elements of authentic learning.

H_1: There are statistically significant relationships across perceptions of the nine elements of authentic learning.

I used a Pearson correlation analysis to test the null hypothesis, which states there are no statistically significant relationships across perceptions of the nine elements of authentic learning. Researchers in previous studies hypothesized (Bozalek et al. 2013; Dyson et al. 2015; Jacquemin et al.'s 2014; Zheng et al., 2018;)that a significant positive relationship would exist across perceptions of the nine elements of authentic learning when using social media as an instructional tool. I analyzed the data I collected using Pearson product correlation quantitative design in order to measure the strength of the association between the two variables. I hypothesized that my study would show what research indicates – there was a statistically significant relationship across perceptions of the nine elements of authentic learning when students used online social networking as an

instructional tool. Following the above procedures, I completed a review of the data analysis to determine what variables the most significant to the study, meaning the correlation was significant at the 0.05 level.

Threats to Validity

There are potential threats to external validity, as well. One issue is the fact that participants in this study were all volunteers. It is possible that those who volunteer to participate in the study were somehow different from other undergraduate composition students. For instance, perhaps those who volunteered have fewer personal responsibilities or are enrolled in less-intense course. These characteristics could have resulted in more time to participate in other activities, including this study, and could impact the way they responded. One other threat to external validity is the possibility of reactivity; because participants knew they were taking part in a study, they may have responded differently than if they did not know they were participating in a study. For instance, it is possible that participants underreported their levels of activity online, time spent online, and how they perceived their authentic learning in order to appear more confident. One other concern was the failure to deduce any cause-and-effect connection between the variables of significance. The purpose of the study only permitted for a linear representation of the tendencies and connections among the variables of significance.

One threat to internal validity was experimental mortality, as it was possible a participant could begin the survey but choose not to complete them. In order to deal with this type of issue, I did no use incomplete data in the final results; in order for a participant to count as a participant, a completed survey must be turned in. I used Pearson

product correlation in my study to measure the level of authentic learning students perceive from online social networking sites using a Likert-type scale survey instrument. An additional limitation was that the perception of each of the nine elements of authentic learning was self-reported. Individuals may not have the same inner definitions of the Likert-type scale ratings. This self-reporting could lead to different definitions and illuminations of the characteristics. In addition, when people self-report data, they convey what they believed at that time. Therefore, recent events or current contexts could have an influence participants. However, these self-reports were the perceptions of these participants, which was the object of this study. Because of the gap in time between the two semesters in the academic institution during this study, it was not conceivable to guarantee the circulation of the survey at the same time of the academic quarter or semester. Hence, the investigation of this potential effect was not possible. This potential lack of equivalency could impact the validity of the study.

One potential threat to construct validity was researcher expectancy. This type of threat can occur when the researcher inserts his or her bias, either consciously or unconsciously. For instance, a researcher may show his or her approval of answers when working with participants; this may lead the participants to answer in certain ways. Because I conducted this study in the virtual setting, I did not have direct contact with the participants when they were completing the study. This lack of direct interaction should have reduced the possibility of researcher expectancy effects.

Ethical Procedures

In order to preserve participants' ethical rights, I provided complete directions for survey questions and responses, the purpose of the methods and purpose of the study, the

risks (if any) involved, and the demands placed upon them as participants in my study, all of which complied with and were approved by Walden University's IRB and the study site's IRB. Walden University's approval number for this study is 05-07-18-0447126, and it expired on May 6, 2019. I also had a partnership with the university research setting, and the university research setting authorized that cooperation and access through a letter of cooperation. That letter was submitted to the IRB and was approved. The participants understood that they might withdraw from my study at any time. When potential participants read the letter of consent, their implied consent was provided when they clicked on the link beginning the survey. I understood my obligations to my participants related to obtaining consent, protecting them from harm, and ensuring their privacy (see Appendix). Since participants volunteered, it is understood and made clear that it was their choice to join, and that there was no force, fraud, deceit, duress, or other forms of constraint or coercion. Participants had the right to discontinue their participation at any time. Through the informed consent, I informed the participants of groups and stakeholders who may see the results of the study, the confidentiality of responses given, and the possible uses of the results of the study. Information obtained or received that was irrelevant or unimportant to the nature of the study were eliminated and deleted. The most significant ethical issue that may have affected the study or its participants was the release of personal information. All surveys and responses were anonymous and remained so through the entire process; I did not collect any personal information or identifiers. I stored the results of the survey and the data compiled from it securely through the online databases and password protected on the website, compiled through SPSS, without using participant names or traceable personal information, and the

compiled data were stored and backed up on a computer that was also password protected. I collected data over a two-month period, compiled and analyzed over another three weeks, with completion of analyses within the year given IRB approval.

Summary

In this chapter, I provided a description of the design and methodology for this quantitative study. This research design offered a thorough analysis of the data where the research question could be understood more fully through the survey by Bozalek et al., (2013); Bozalek and Watters, (2014); and Herrington and Oliver, (2000) (see Appendix). Specifically, I described my role as a researcher as an observer of the authentic learning environment of a southern university. I identified their students' perceptions of the learning environment when using social media. The quantitative research question was designed to understand how students perceive their authentic learning while using social media as an instructional tool. The Chapter 3 methodology section included the research design and rationale, the research question, participation selection logic, discussion of a valid survey instrument based on Herrington and Oliver's (2000) authentic learning framework, and modified instrument from Bozalek et al., (2013) and Bozalek and Watters (2014) and subsequently used in multiple studies. I addressed recruitment for this study, participation and data collection procedures, and the data analysis plan. Issues of the validity of quantitative data, as well as ethical procedures for conducting research conclude this chapter.

In Chapter 4, I will explain the results of the study. First, I provide a description of data collection. This discussion includes information regarding recruitment and response rates, as well as a discussion of the demographic characteristics of the sample.

At the end of the overview, I will provide a discussion of the statistical analysis and my findings.

Chapter 4: Results

Introduction

The purpose of my quantitative study was to determine the perceptions of undergraduate first-year freshmen composition students using social media as instructional tools, across nine elements of authentic learning. I designed the research question to better understand how students perceive their authentic learning while using social media as an instructional tool, all of which was measured using a modified instrument originally developed by Bozalek et al., (2013); Bozalek and Watters, (2014); and based on the nine elements of authentic learning from Herrington and Oliver (2000) and adapted by me with their permission (see Appendix).

RQ1: For undergraduate freshman composition students using social media (i.e., Facebook and Twitter) as instructional tools, what relationships exist across student perceptions of the nine elements of authentic learning? The nine elements of authentic learning include:

> 1) Provide authentic context that reflects the way the knowledge will be used in real-life; 2) Provide authentic activities; 3) Provide access to expert performances and the modeling of processes; 4) Provide multiple roles and perspectives; 5) Support collaborative construction of knowledge; 6) Promote reflection; 7) Promote articulation; 8) Provide coaching and scaffolding; and 9) Provide for authentic assessment of learning within the tasks (Herrington & Oliver, 2000, p.4).

H_0: There are no statistically significant relationships across perceptions of the nine elements of authentic learning.

H_1: There are statistically significant relationships across perceptions of the nine elements of authentic learning.

In this chapter, I will focus on reporting the results of the study. First, I will provide a description of data collection. This description will include information regarding recruitment and response rates, as well as a description of the demographic characteristics of the sample. Following this outline, I will provide a description of the statistical analysis and findings.

Data Collection

As outlined previously, I needed a total of 50 total participants in order to achieve a statistical power level of .80, a .05 probability level, and an effect size of 23. I collected data online by SurveyMonkey.com using the tool Perceptions of Authentic Learning, originally developed by Bozalek et al., (2013); Bozalek and Watters, (2014); and based on the nine elements of authentic learning from Herrington and Oliver, (2000), and I adapted with their permission (see Appendix). The tool had 41 questions about authentic learning divided into nine subcategories that aligned into the nine elements of authentic learning and a six question demographic survey (gender, age, which social media students use, how often students use Twitter, how often students use Facebook, and how students use the internet.). Altogether, the survey took 10 to 15 minutes for students to complete, according to the SurveyMonkey.com website's timer. Directions on the survey directed students to rate their authentic learning according to the nine elements of authentic learning on a Likert-type scale, 1 being the lowest and 5 being the highest. The recruitment of participants took about two months altogether, one month in the fall semester of 2018, in which I gained 35 participants, and one month in the spring semester

of 2019, in which I gained 15 participants, giving me a total of 50 participants for my study.

Table 1 shows participant demographics. I omitted all demographics from the analyses. However, I gathered demographic information for any future examinations. This information is also useful for describing the sample obtained for this study. A total of 35 participants identified themselves as female, making up 70% of the sample, and another 14 participants identified themselves as male, making up 28%, while a single participant, 2%, did not identify as male or female. Of these 50 responses, 58% were students under 21 years old, 30% of students aged 21 to 22, 10% of students were 23 to 25, and 2% of students were 26 or older.

The demographic representative of the sample population was an accurate representation of the population of interest and proportional to the larger population on the university campus. The enrolled student population under the age of 21 is 54.32%, 21 to 24 is 24.2%, 25 to 29 is 9.6%, 30 to 34 is 4.5%, and age 35 and over is 6.3% (Team, 2019). The enrolled student population includes both full-time and part-time students as well as graduate and undergraduates. The gender demographics vary from the population of interest; the enrolled undergrad student male population is 50.5%, and the undergrad student female population is 49.5%. The enrolled student population was slightly different from the sample used in my study. The participants in my study were a fair representation of the population of the large south eastern university; however, the population sample used is a nonprobability sample because all of the participants are enrolled English 101/102 classes.

Table 1

Demographics of Student Participants

Variable	Details	Participant Percentages
Age	Under 21	58%
	21-22	30%
	23-25	10%
	26-older	2%
Gender	Male	28%
	Female	71%
	Unidentified	1%
Social Media Used	Facebook	72%
	Twitter	66%
	Pinterest	48%
	Myspace	2%
	Tumblr	14%
	Instagram	86%
	Vine	12%
	LinkedIn	16%
	Google+	8%
How Often Students Check Facebook	Rarely	18%
	1-5 times per day	24%
	6-10 times per day	18%
	Constantly	22%
	I'm not on Facebook	18%
How Often Students Check Twitter	Rarely	18%
	1-5 times per day	12%
	6-10 times per day	16%
	Constantly	34%
	I'm not on Twitter	20%
How Many Hours Students Spend on the Internet Every Week	0-5 hours	4%
	6-10 hours	6%
	11-20 hours	26%
	21-30 hours	38%
	31-40 hours	20%
	More than 40 hours	6%

Note. Demographics represents 50 participants and 2 different classes.

Results

In the following section, I will provide an overview of the findings of the study. I organized this section according to the nine elements in the research question to allow for a clear understanding of how each element was addressed. I performed the all analyses using SPSS 25 for PC. Students in the English 101/102 classes, taught with nontraditional

instructional and traditional strategies, totaled 50 students (n = 50). With the majority of the college campus utilizing online social media, the English 101/102 students reported Instagram, Twitter, and Facebook as the most popular modes of online social media. English 101/102 students are also on Twitter more often or longer than they are on Facebook; however, the majority of students reported being online altogether 21 to 30 hours per week (see Table 1).

In my study, I asked whether or not there was a statistically significant relationship across perceptions of the nine elements of authentic learning for undergraduate freshman composition students using social media (i.e., Facebook and Twitter) as instructional tools. In order to determine if there was a significant relationship across student perceptions of their authentic learning when using social media an instructional tool, which included questions specific to the nine elements of authentic learning, I conducted a Pearson product correlation. The nine elements of authentic learning are:

> 1) Provide authentic context that reflects the way the knowledge will be used in real-life; 2) Provide authentic activities; 3) Provide access to expert performances and the modeling of processes; 4) Provide multiple roles and perspectives; 5) Support collaborative construction of knowledge; 6) Promote reflection; 7) Promote articulation; 8) Provide coaching and scaffolding; and 9) Provide for authentic assessment of learning within the tasks (Herrington & Oliver, 2000, p. 4).

Authentic Learning Element 1

The Authentic Learning Element 1 related to whether the learning reflected the way the knowledge was used in real-life. I calculated a Pearson product correlation to assess the relationship between the students' perceptions of their transfer skills or knowledge from Facebook/Twitter to other areas in an authentic manner and their other authentic learning tasks. Overall, there was a strong, positive correlation between students' perceptions of their transfer skills or knowledge from Facebook/Twitter to other areas in an authentic manner and Learning Elements 1b, 2e, and 6. I observed a medium, positive correlation between Learning Element 1 and 13 other variables. I noted a small, positive correlation between Learning Element 1 and 3 other variables. See Table 2 for specific correlation values and *p* values.

Table 2

Significant Correlations – Learning Element 1: Transfer skills or knowledge from Facebook/Twitter to other areas in an authentic manner

Learning Element #	Variable	R	*p*
1b	Switch from social media to course material	.672	.000
2e	There are activities and strategies relevant to other disciplines and broader knowledge access through Facebook/ Twitter	.533	.000
6	Students are required to make decisions about how to complete the task, with some thought and reflective writing through Facebook/ Twitter	.524	.000
2b	Tasks in class are more complex than those on Facebook/ Twitter	.456	.001
3	Students' classroom provides access to expert skill and opinion	.443	.001
4	In classroom, students are able to explore issues from different points of view	.430	.002
6c	Students compare thoughts and ideas to peers, teachers, and to others on Facebook/ Twitter	.409	.003
2d	Able to determine relevant information from a variety of inputs, using Facebook/ Twitter	.402	.004
5	In classroom, students are able to collaborate	.398	.004
9g	The class instructor uses multiple assessment measures rather than a single measure on Facebook/ Twitter	.392	.005
3e	In classroom, students are able to hear and share stories about professional practice	.391	.005
2c	The time required to perform for class is weeks rather than minutes or hours on Facebook/ Twitter	.374	.007
9b	Students participate in various activities for extended periods of time in your class	.353	.012
9d	Students are assessed on the result of the learning process while in class	.337	.017
2	Tasks in class mirror those on Facebook/ Twitter	.336	.017
4c	In classroom, students are able to use the learning resources and materials for multiple purposes	.308	.030
8d	The class instructor is available to provide contextualized support on social media outlets like Facebook/ Twitter	.291	.040
4b	On Facebook/ Twitter pages, students are able to explore issues from different points of view	.286	.044
4d	On Facebook/ Twitter pages, students are able to use the learning resources and materials for multiple purposes	.286	.044

Note. N = 50. Class or classroom = English 101/102 class

I calculated a Pearson product correlation to assess the relationship between the students' perceptions of their ability to switch from social media to course material and their other authentic learning tasks. Overall, there was a strong, positive correlation

between students' perceptions of their ability to switch from social media to course material and Learning Element 5. I observed a medium, positive correlation between Learning Element 1b and 19 other variables. I noted a small, positive correlation was noted between Learning Element 1b and 3 other variables. See Table 3 for specific correlation values and *p* values.

Table 3

Significant Correlations – Learning Element 1b: Switch from social media to course material

Learning Element #	Variable	R	*p*
5	In classroom, students are able to collaborate	.517	.000
9g	The class instructor uses multiple assessment measures rather than a single measure on Facebook/ Twitter	.465	.001
6b	In classroom and Facebook/ Twitter pages, students are able to move freely in the environment and return to any page upon reflection	.433	.002
2c	The time required to perform for class is weeks rather than minutes or hours on Facebook/ Twitter	.420	.002
2d	Able to determine relevant information from a variety of inputs, using Facebook/ Twitter	.413	.003
9d	Students are assessed on the result of the learning process while in class	.411	.003
4	In classroom, students are able to explore issues from different points of view	.405	.003
3e	Students are able to hear and share stories about professional practice	.403	.004
2e	There are activities and strategies relevant to other disciplines and broader knowledge access through Facebook/ Twitter	.400	.004
8d	The class instructor is available to provide contextualized support on social media outlets like Facebook/ Twitter	.381	.006
9c	Students participate in various activities for extended periods of time on your Facebook/ Twitter pages	.376	.007
2b	Tasks in class are more complex than those on Facebook/ Twitter	.371	.008
2	Tasks in class mirror those on Facebook/ Twitter	.364	.009
6	Students are required to make decisions about how to complete the task, with some thought and reflective writing through Facebook/ Twitter	.350	.013
8	More knowledgeable students are able to assist with tutoring in the classroom.	.348	.013
3	Students' classroom provides access to expert skill and opinion	.347	.014
6c	Students compare thoughts and ideas to peers, teachers, and to others on Facebook/ Twitter	.340	.016
5c	In class, grades are given for group effort, rather than individual effort	.339	.016
8c	The class instructor is available to provide contextualized support in the classroom	.322	.022
3c	Classroom allows access to other learners at various stages of expertise	.311	.029
4d	On Facebook/ Twitter pages, students are able to use the learning resources and materials for multiple purposes	.298	.035
4c	In classroom, students are able to use the learning resources and materials for multiple purposes	.291	.040
5b	On Facebook/ Twitter pages, students are able to collaborate on tasks	.279	.049

Note. N = 50. Class or classroom = English 101/102 class

Authentic Learning Element 2

The Authentic Learning Element 2 related to whether or not the learning provided authentic activities. I calculated a Pearson product correlation to assess the relationship between the students' perceptions of how the tasks they completed in English 101/102 mirror those on Facebook/ Twitter and their other authentic learning tasks. Overall, results showed a strong, positive correlation between students' perceptions of how the tasks they completed in English 101/102 mirror those on Facebook/ Twitter and Learning Elements 3b. I observed a medium, positive correlation between Learning Element 2 and 10 other variables. I noted a small, positive correlation between Learning Element 2 and 1 other variable. See Table 4 for specific correlation values and *p* values.

Table 4

Significant Correlations – Learning Element 2: Tasks in English 101/102 mirror those on Facebook/ Twitter

Learning Element #	Variable	R	*p*
3b	Students' Facebook/ Twitter pages provide access to expert skill and opinion	.686	.000
8d	The class instructor is available to provide contextualized support on social media outlets like Facebook/ Twitter	.477	.000
6	Students are required to make decisions about how to complete the task, with some thought and reflective writing through Facebook/ Twitter	.464	.001
5c	In class, grades are given for group effort, rather than individual effort	.398	.004
6c	Students compare thoughts and ideas to peers, teachers, and to others on Facebook/ Twitter	.382	.006
9e	Students are assessed on the result of the learning process while on Facebook/ Twitter	.376	.007
6d	In class, students work in collaborative groups that enable discussion and social reflection on Facebook/ Twitter	.334	.018
9c	Students participate in various activities for extended periods of time on your Facebook/ Twitter pages	.330	.019
7d	Students complete tasks on Facebook/ Twitter that enable groups and forums the chance to discuss ideas	.314	.027
7	Students are required to discuss and explain beliefs and gain a growing understanding of the real world in class	.313	.027
8b	More knowledgeable students are able to assist with tutoring on social media outlets like Facebook/ Twitter	.302	.033
7b	Students are required to discuss and explain beliefs and gain a growing understanding of the real world on Facebook/Twitter pages	.290	.041

Note. N = 50. Class or classroom = English 101/102 class

I computed a Pearson product correlation to assess the relationship between the students' perceptions of how the tasks in English 101/102 are more complex than those on Facebook/ Twitter and their other authentic learning tasks. Overall, there was a strong, positive correlation between students' perceptions of how the tasks in English 101/102 are more complex than those on Facebook/ Twitter and Learning Element 6. There was a medium, positive correlation between Learning Element 2b and 19 other variables. A small, positive correlation was noted between Learning Element 2b and 6 other variables. See Table 5 for specific correlation values and *p* values.

Table 5

Significant Correlations – Learning Element 2b: Tasks in English 101/102 are more complex than those on Facebook/ Twitter

Learning Element #	Variable	R	*p*
6	Students are required to make decisions about how to complete the task, with some thought and reflective writing through Facebook/ Twitter	.505	.000
4	In classroom, students are able to explore issues from different points of view	.489	.000
4c	In classroom, students are able to use the learning resources and materials for multiple purposes	.471	.001
8	More knowledgeable students are able to assist with tutoring in the classroom.	.457	.001
3	Students' classroom provides access to expert skill and opinion	.454	.001
9g	The class instructor uses multiple assessment measures rather than a single measure on Facebook/ Twitter	.442	.001
2e	There are activities and strategies relevant to other disciplines and broader knowledge access through Facebook/ Twitter	.411	.003
5	In classroom, students are able to collaborate	.398	.004
4b	On Facebook/ Twitter pages, students are able to explore issues from different points of view	.396	.004
5c	In class, grades are given for group effort, rather than individual effort	.394	.005
7c	Students complete tasks in class that enable groups and forums the chance to discuss ideas	.394	.005
3f	On Facebook/ Twitter pages, students are able to hear and share stories about professional practice	.393	.000
3d	Students' Facebook/ Twitter pages allow access to other learners at various stages of expertise	.391	.040
9	Students are assessed on the result of the learning process while in class	.391	.005
7e	Students complete tasks in class that enable discussion and defense of arguments	.379	.007
9d	Students are assessed on the result of the learning process while in class	.362	.010
3e	Classroom, students are able to hear and share stories about professional practice	.361	.010
7	Students are required to discuss and explain beliefs and gain a growing understanding of the real world in class	.343	.015
6c	Students compare thoughts and ideas to peers, teachers, and to others on Facebook/ Twitter	.316	.025
7f	Students complete tasks on Facebook/ Twitter that enable discussion and defense of arguments	.313	.029
2c	The time required to perform for class is weeks rather than minutes or hours on Facebook/ Twitter	.297	.036
6b	In classroom and Facebook/ Twitter pages, students are able to move freely in the environment and return to any page upon reflection	.294	.038
9f	The class instructor uses multiple assessment measures rather than a single measure in class	.289	.042
6d	In class, students work in collaborative groups that enable discussion and social reflection on Facebook/ Twitter	.285	.045
9e	Students are assessed on the result of the learning process while on Facebook/ Twitter	.281	.048

Note. N = 50. Class or classroom = English 101/102 class

I calculated a Pearson product correlation to assess the relationship between the students' perceptions the time required to perform for English 101/102 is weeks rather than minutes or hours on Facebook/ Twitter and their other authentic learning tasks. Overall, there was a strong, positive correlation between students' perceptions the time required to perform for English 101/102 is weeks rather than minutes or hours on Facebook/ Twitter and Learning Elements 8 and 4. I observed a medium, positive correlation between Learning Element 2c and 24 other variables. I noted a small, positive correlation between Learning Element 2c and 2 other variables. See Table 6 for specific correlation values and *p* values.

Table 6

Significant Correlations – Learning Element 2c: The time required to perform for English 101/102 is weeks rather than minutes or hours on Facebook/ Twitter

Learning Element #	Variable	R	*p*
8	More knowledgeable students are able to assist with tutoring in the classroom.	.541	.000
4	In classroom, students are able to explore issues from different points of view	.521	.000
2e	There are activities and strategies relevant to other disciplines and broader knowledge access through Facebook/ Twitter	.489	.000
7e	Students complete tasks in class that enable discussion and defense of arguments	.487	.000
4b	On Facebook/ Twitter pages, students are able to explore issues from different points of view	.476	.000
9f	The class instructor uses multiple assessment measures rather than a single measure in class	.474	.001
9d	Students are assessed on the result of the learning process while in class	.446	.001
7	Students are required to discuss and explain beliefs and gain a growing understanding of the real world in class	.424	.002
6	Students are required to make decisions about how to complete the task, with some thought and reflective writing through Facebook/ Twitter	.423	.002
7f	Students complete tasks on Facebook/ Twitter that enable discussion and defense of arguments	.416	.003
3d	Students' Facebook/ Twitter pages allow access to other learners at various stages of expertise	.408	.003
3	Students' classroom provides access to expert skill and opinion	.407	.003
5	In classroom, students are able to collaborate	.407	.003
2d	Able to determine relevant information from a variety of inputs, using Facebook/ Twitter	.397	.004
9	Students are assessed on the result of the learning process while in class	.377	.007
3c	Classroom allows access to other learners at various stages of expertise	.370	.009
6b	In classroom and Facebook/ Twitter pages, students are able to move freely in the environment and return to any page upon reflection	.358	.011
7b	Students are required to discuss and explain beliefs and gain a growing understanding of the real world on Facebook/Twitter pages	.349	.013
8c	The class instructor is available to provide contextualized support in the classroom	.344	.014
7c	Students complete tasks in class that enable groups and forums the chance to discuss ideas	.339	.016
9e	Students are assessed on the result of the learning process while on Facebook/ Twitter	.324	.022
7d	Students complete tasks on Facebook/ Twitter that enable groups and forums the chance to discuss ideas	.323	.022
3b	Students' Facebook/ Twitter pages provide access to expert skill and opinion	.317	.025
4c	In classroom, students are able to use the learning resources and materials for multiple purposes	.313	.027
8d	The class instructor is available to provide contextualized support on social media outlets like Facebook/ Twitter	.312	.027
9c	Students participate in various activities for extended periods of time on your Facebook/ Twitter pages	.305	.031
3f	On Facebook/ Twitter pages, students are able to hear and share stories about professional practice	.290	.041
3e	In classroom, students are able to hear and share stories about professional practice	.284	.045

Note. N = 50. Class or classroom = English 101/102 class

I calculated a Pearson product correlation to assess the relationship between the students' perceptions of their ability to determine relevant information from a variety of inputs, using Facebook/ Twitter and their other authentic learning tasks. Overall, there

was a strong, positive correlation between students' perceptions of their ability to determine relevant information from a variety of inputs, using Facebook/ Twitter and Learning Elements 5, 3c, 4d, 4, 9f, 3, 9b, 7, 9d, 8c, and 8. I observed a medium, positive correlation between Learning Element 2d and 11 other variables. I noted a small, positive correlation between Learning Element 2d and 3 other variables. See Table 7 for specific correlation values and p values.

Table 7

Significant Correlations – Learning Element 2d: Able to determine relevant information from a variety of inputs, using Facebook/ Twitter

Element Learning #	Variable	R	*p*
5	In classroom, students are able to collaborate	.680	.000
3c	Classroom allows access to other learners at various stages of expertise	.625	.000
4d	On Facebook/ Twitter pages, students are able to use the learning resources and materials for multiple purposes	.604	.000
4	In classroom, students are able to explore issues from different points of view	.565	.497
9f	The class instructor uses multiple assessment measures rather than a single measure in class	.553	.000
3	Students' classroom provides access to expert skill and opinion	.544	.000
9b	Students participate in various activities for extended periods of time in your class	.517	.000
7	Students are required to discuss and explain beliefs and gain a growing understanding of the real world in class	.514	.000
9d	Students are assessed on the result of the learning process while in class	.512	.000
8c	The class instructor is available to provide contextualized support in the classroom	.503	.000
8	More knowledgeable students are able to assist with tutoring in the classroom.	.502	.000
4b	On Facebook/ Twitter pages, students are able to explore issues from different points of view	.497	.000
4c	In classroom, students are able to use the learning resources and materials for multiple purposes	.474	.001
3e	In classroom, students are able to hear and share stories about professional practice	.468	.001
6b	In classroom and Facebook/ Twitter pages, students are able to move freely in the environment and return to any page upon reflection	.466	.001
9	Students are assessed on the result of the learning process while in class	.450	.001
8d	The class instructor is available to provide contextualized support on social media outlets like Facebook/ Twitter	.420	.002
3d	Students' Facebook/ Twitter pages allow access to other learners at various stages of expertise	.419	.002
6	Students are required to make decisions about how to complete the task, with some thought and reflective writing through Facebook/ Twitter	.380	.006
2e	There are activities and strategies relevant to other disciplines and broader knowledge access through Facebook/ Twitter	.369	.008
9c	Students participate in various activities for extended periods of time on your Facebook/ Twitter pages	.335	.017
7c	Students complete tasks in the class that enable groups and forums the chance to discuss ideas	.333	.016
7d	Students complete tasks on Facebook/ Twitter that enable groups and forums the chance to discuss ideas	.290	.041
9g	The class instructor uses multiple assessment measures rather than a single measure on Facebook/ Twitter	.287	.043
3b	Students' Facebook/ Twitter pages provide access to expert skill and opinion	.282	.047

Note. N = 50. Class or classroom = English 101/102 class

I calculated a Pearson product correlation to assess the relationship between the students' perceptions of the activities and strategies relevant to other disciplines and broader knowledge access through Facebook/Twitter and their other authentic learning tasks. Overall, there was a strong, positive correlation between students' perceptions of

the activities and strategies relevant to other disciplines and broader knowledge access through Facebook/ Twitter and Learning Elements 9e, 4b, 3e, 3f, 3, and 9c. I observed a medium, positive correlation between Learning Element 2e and 17 other variables. I noted a small, positive correlation between Learning Element 2e and 4 other variables. See Table 8 for specific correlation values and *p* values.

Table 8

Significant Correlations – Learning Element 2e: There are activities and strategies relevant to other disciplines and broader knowledge access through Facebook/ Twitter

Learning Element #	Variable	R	*p*
9e	Students are assessed on the result of the learning process while on Facebook/ Twitter	.578	.000
4b	On Facebook/ Twitter pages, students are able to explore issues from different points of view	.574	.000
3e	In classroom, students are able to hear and share stories about professional practice	.561	.000
3f	On Facebook/ Twitter pages, students are able to hear and share stories about professional practice	.559	.000
3	Students' classroom provides access to expert skill and opinion	.550	.000
9c	Students participate in various activities for extended periods of time on your Facebook/ Twitter pages	.532	.000
6	Students are required to make decisions about how to complete the task, with some thought and reflective writing through Facebook/ Twitter	.483	.000
6c	Students compare thoughts and ideas to peers, teachers, and to others on Facebook/ Twitter	.462	.001
6d	In class, students work in collaborative groups that enable discussion and social reflection on Facebook/ Twitter	.456	.001
7e	Students complete tasks in the class that enable discussion and defense of arguments	.445	.001
4	In the classroom, students are able to explore issues from different points of view	.438	.001
5	In the classroom, students are able to collaborate	.422	.002
5b	On Facebook/ Twitter pages, students are able to collaborate on tasks	.414	.003
3d	Learning Element 3d: Students' Facebook/ Twitter pages allow access to other learners at various stages of expertise	.402	.004
9d	Students are assessed on the result of the learning process while in class	.396	.004
9	Students are assessed on the result of the learning process while in class	.390	.005
7	Students are required to discuss and explain beliefs and gain a growing understanding of the real world in class	.368	.009
9g	The class instructor uses multiple assessment measures rather than a single measure on Facebook/ Twitter	.357	.011
9f	The class instructor uses multiple assessment measures rather than a single measure in class	.352	.012
8	More knowledgeable students are able to assist with tutoring in the classroom.	.343	.015
8c	The class instructor is available to provide contextualized support in the classroom	.339	.016
4d	On Facebook/ Twitter pages, students are able to use the learning resources and materials for multiple purposes	.334	.018
8d	The class instructor is available to provide contextualized support on social media outlets like Facebook/ Twitter	.321	.023
5c	In class, grades are given for group effort, rather than individual effort	.289	.041
7b	Students are required to discuss and explain beliefs and gain a growing understanding of the real world on Facebook/Twitter pages	.286	.044
6b	In classroom and Facebook/ Twitter pages, students are able to move freely in the environment and return to any page upon reflection	.280	.049
7c	Students complete tasks in class that enable groups and forums the chance to discuss ideas	.279	.050

Note. N = 50. Class or classroom = English 101/102 class

Authentic Learning Element 3

The Authentic Learning Element 3 related to providing multiple roles and perspectives. I calculated a Pearson product correlation to assess the relationship between

the students' perceptions of the activities and strategies relevant to other disciplines and broader knowledge access through Facebook/ Twitter and their other authentic learning tasks. Overall, there was a strong, positive correlation between students' perceptions of the activities and strategies relevant to other disciplines and broader knowledge access through Facebook/ Twitter and Learning Elements 4, 5, 7, 8c, 9d, 7e, 8, 7c, 9, 4c, and 6b. I observed a medium, positive correlation between Learning Element 3 and 12 other variables. See Table 9 for specific correlation values and *p* values.

Table 9

Significant Correlations – Learning Element 3: There are activities and strategies relevant to other disciplines and broader knowledge access through Facebook/ Twitter

Learning Element #	Variable	R	*p*
4	In the classroom, students are able to explore issues from different points of view	.686	.000
5	In the classroom, students are able to collaborate	.676	.000
7	Students are required to discuss and explain beliefs and gain a growing understanding of the real world in class	.596	.000
8c	The class instructor is available to provide contextualized support in the classroom	.596	.000
9d	Students are assessed on the result of the learning process while in class	.564	.000
7e	Students complete tasks in class that enable discussion and defense of arguments	.546	.000
8	More knowledgeable students are able to assist with tutoring in the classroom.	.546	.000
7c	Students complete tasks in class that enable groups and forums the chance to discuss ideas	.540	.000
9	Students are assessed on the result of the learning process while in class	.530	.000
4c	In the classroom, students are able to use the learning resources and materials for multiple purposes	.529	.000
6b	In the classroom and Facebook/ Twitter pages, students are able to move freely in the environment and return to any page upon reflection	.507	.000
9f	The class instructor uses multiple assessment measures rather than a single measure in class	.491	.000
3e	In the classroom, students are able to hear and share stories about professional practice	.481	.000
4b	On Facebook/ Twitter pages, students are able to explore issues from different points of view	.432	.002
3d	Students' Facebook/ Twitter pages allow access to other learners at various stages of expertise	.427	.002
6	Students are required to make decisions about how to complete the task, with some thought and reflective writing through Facebook/ Twitter	.425	.002
5c	In the class, grades are given for group effort, rather than individual effort	.387	.005
8d	The class instructor is available to provide contextualized support on social media outlets like Facebook/ Twitter	.383	.006
3c	The classroom allows access to other learners at various stages of expertise	.377	.008
9b	Students participate in various activities for extended periods of time in your class	.369	.008
9g	The class instructor uses multiple assessment measures rather than a single measure on Facebook/ Twitter	.363	.010
6c	Students compare thoughts and ideas to peers, teachers, and to others on Facebook/ Twitter	.353	.012
4d	On Facebook/ Twitter pages, students are able to use the learning resources and materials for multiple purposes	.329	.020

Note. N = 50. Class or classroom = English 101/102 class

I calculated a Pearson product correlation to assess the relationship between the students' perceptions of students' Facebook/ Twitter pages provide access to expert skill and opinion and their other authentic learning tasks. Overall, there was a strong, positive correlation between students' perceptions of students' Facebook/ Twitter pages provide access to expert skill and opinion and Learning Elements 6b and 7d. I observed a medium, positive correlation between Learning Element 3b and 13 other variables. See Table 10 for specific correlation values and *p* values.

Table 10

Significant Correlations – Learning Element 3b: Students' Facebook/ Twitter pages provide access to expert skill and opinion

Learning Element #	Variable	R	*p*
6b	In the classroom and Facebook/ Twitter pages, students are able to move freely in the environment and return to any page upon reflection	.517	.000
7d	Students complete tasks on Facebook/ Twitter that enable groups and forums the chance to discuss ideas	.507	.000
7	Students are required to discuss and explain beliefs and gain a growing understanding of the real world in class	.460	.001
8d	The class instructor is available to provide contextualized support on social media outlets like Facebook/ Twitter	.443	.001
8b	More knowledgeable students are able to assist with tutoring on social media outlets like Facebook/ Twitter	.434	.002
6	Students are required to make decisions about how to complete the task, with some thought and reflective writing through Facebook/ Twitter	.401	.004
4	In the classroom, students are able to explore issues from different points of view	.372	.008
9f	The class instructor uses multiple assessment measures rather than a single measure in class	.371	.008
5c	In the class, grades are given for group effort, rather than individual effort	.355	.011
7e	Students complete tasks in class that enable discussion and defense of arguments	.349	.013
5	In the classroom, students are able to collaborate	.347	.014
6d	In the class, students work in collaborative groups that enable discussion and social reflection on Facebook/ Twitter	.345	.014
3d	Students' Facebook/ Twitter pages allow access to other learners at various stages of expertise	.341	.015
7b	Students are required to discuss and explain beliefs and gain a growing understanding of the real world on Facebook/Twitter pages	.339	.016
6c	Students compare thoughts and ideas to peers, teachers, and to others on Facebook/ Twitter	.327	.020
4c	In the classroom, students are able to use the learning resources and materials for multiple purposes	.311	.028
3f	On Facebook/ Twitter pages, students are able to hear and share stories about professional practice	.306	.031

Note. N = 50. Class or classroom = English 101/102 class

I calculated a Pearson product correlation to assess the relationship between the students' perceptions of English 101/102 classroom allowing access to other learners at various stages of expertise and their other authentic learning tasks. Overall, there was a strong, positive correlation between students' perceptions of English 101/102 classroom allowing access to other learners at various stages of expertise and Learning Elements 4c, 4, and 5. I observed a medium, positive correlation between Learning Element 3c and 16 other variables. I noted a small, positive correlation between Learning Element 3c and 2 other variables. See Table 11 for specific correlation values and *p* values.

Table 11

Significant Correlations – Learning Element 3c: English 101/102 classroom allows access to other learners at various stages of expertise

Learning Element #	Variable	R	*p*
4c	In the classroom, students are able to use the learning resources and materials for multiple purposes	.573	.000
4	In the classroom, students are able to explore issues from different points of view	.538	.000
5	In the classroom, students are able to collaborate	.512	.000
9f	The class instructor uses multiple assessment measures rather than a single measure in class	.493	.000
3e	In the classroom, students are able to hear and share stories about professional practice	.490	.000
6b	In the classroom and Facebook/ Twitter pages, students are able to move freely in the environment and return to any page upon reflection	.464	.001
8	More knowledgeable students are able to assist with tutoring in the classroom.	.445	.001
4d	On Facebook/ Twitter pages, students are able to use the learning resources and materials for multiple purposes	.437	.002
9b	Students participate in various activities for extended periods of time in your class	.421	.003
9d	Students are assessed on the result of the learning process while in class	.421	.003
7	Students are required to discuss and explain beliefs and gain a growing understanding of the real world in class	.383	.007
5c	In the class, grades are given for group effort, rather than individual effort	.361	.011
8d	The class instructor is available to provide contextualized support on social media outlets like Facebook/ Twitter	.356	.012
8b	More knowledgeable students are able to assist with tutoring on social media outlets like Facebook/ Twitter	.337	.018
9	Students are assessed on the result of the learning process while in class	.333	.020
7c	Students complete tasks in class that enable groups and forums the chance to discuss ideas	.327	.022
9g	The class instructor uses multiple assessment measures rather than a single measure on Facebook/ Twitter	.318	.026
7e	Students complete tasks in class that enable discussion and defense of arguments	.305	.033
4b	On Facebook/ Twitter pages, students are able to explore issues from different points of view	.300	.037
7d	Students complete tasks on Facebook/ Twitter that enable groups and forums the chance to discuss ideas	.296	.039
8c	The class instructor is available to provide contextualized support in the classroom	.290	.043

Note. N = 50. Class or classroom = English 101/102 class

I calculated a Pearson product correlation to assess the relationship between the students' perceptions of students' Facebook/ Twitter pages allow access to other learners at various stages of expertise and their other authentic learning tasks. Overall, there was a strong, positive correlation between students' perceptions of students' Facebook/ Twitter pages allow access to other learners at various stages of expertise and Learning Elements

4b, 7, 3f, 9d, and 8. I observed a medium, positive correlation between Learning Element 3d and 15 other variables. I noted a small, positive correlation between Learning Element 3d and 1 other variable. See Table 12 for specific correlation values and *p* values.

Table 12

Significant Correlations – Learning Element 3d: Students' Facebook/ Twitter pages allow access to other learners at various stages of expertise

Learning Element #	Variable	R	*p*
4b	On Facebook/ Twitter pages, students are able to explore issues from different points of view	.599	.000
7	Students are required to discuss and explain beliefs and gain a growing understanding of the real world in class	.546	.000
3f	On Facebook/ Twitter pages, students are able to hear and share stories about professional practice	.537	.000
9d	Students are assessed on the result of the learning process while in class	.529	.000
8	More knowledgeable students are able to assist with tutoring in the classroom.	.525	.000
7c	Students complete tasks in class that enable groups and forums the chance to discuss ideas	.492	.000
5	In the classroom, students are able to collaborate	.489	.000
4d	On Facebook/ Twitter pages, students are able to use the learning resources and materials for multiple purposes	.439	.001
7e	Students complete tasks in class that enable discussion and defense of arguments	.438	.001
9c	Students participate in various activities for extended periods of time on your Facebook/ Twitter pages	.434	.002
4	In the classroom, students are able to explore issues from different points of view	.430	.002
9f	The class instructor uses multiple assessment measures rather than a single measure in class	.429	.002
7f	Students complete tasks on Facebook/ Twitter that enable discussion and defense of arguments	.423	.002
8c	The class instructor is available to provide contextualized support in the classroom	.422	.002
9	Students are assessed on the result of the learning process while in class	.394	.005
8d	The class instructor is available to provide contextualized support on social media outlets like Facebook/ Twitter	.385	.006
7d	Students complete tasks on Facebook/ Twitter that enable groups and forums the chance to discuss ideas	.381	.006
8b	More knowledgeable students are able to assist with tutoring on social media outlets like Facebook/ Twitter	.357	.011
4c	In the classroom, students are able to use the learning resources and materials for multiple purposes	.330	.019
5b	On Facebook/ Twitter pages, students are able to collaborate on tasks	.307	.030
6b	In the classroom and Facebook/ Twitter pages, students are able to move freely in the environment and return to any page upon reflection	.291	.040

Note. N = 50. Class or classroom = English 101/102 class

I calculated a Pearson product correlation to assess the relationship between the students' perceptions of students in an English 101/102 classroom able to hear and share

stories about professional practice and their other authentic learning tasks. Overall, there was a strong, positive correlation between students' perceptions of students in an English 101/102 classroom able to hear and share stories about professional practice and Learning Elements 5, 4, 7e, 9g, 4c, and 6c. I observed a medium, positive correlation between Learning Element 3e and 15 other variables. I noted a small, positive correlation between Learning Element 3e and 1 other variable. See Table 13 for specific correlation values and *p* values.

Table 13

Significant Correlations – Learning Element 3e: In English 101/102 classroom, students are able to hear and share stories about professional practice

Learning Element #	Variable	R	*p*
5	In the classroom, students are able to collaborate	.639	.000
4	In the classroom, students are able to explore issues from different points of view	.631	.000
7e	Students complete tasks in class that enable discussion and defense of arguments	.556	.000
9g	The class instructor uses multiple assessment measures rather than a single measure on Facebook/ Twitter	.523	.000
4c	In the classroom, students are able to use the learning resources and materials for multiple purposes	.511	.000
6c	Students compare thoughts and ideas to peers, teachers, and to others on Facebook/ Twitter	.506	.000
9f	The class instructor uses multiple assessment measures rather than a single measure in class	.471	.001
9c	Students participate in various activities for extended periods of time on your Facebook/ Twitter pages	.458	.001
6d	In the class, students work in collaborative groups that enable discussion and social reflection on Facebook/ Twitter	.454	.001
6	Students are required to make decisions about how to complete the task, with some thought and reflective writing through Facebook/ Twitter	.438	.001
8	More knowledgeable students are able to assist with tutoring in the classroom.	.429	.002
6b	In the classroom and Facebook/ Twitter pages, students are able to move freely in the environment and return to any page upon reflection	.416	.003
9d	Students are assessed on the result of the learning process while in class	.398	.004
8d	The class instructor is available to provide contextualized support on social media outlets like Facebook/ Twitter	.395	.005
4d	On Facebook/ Twitter pages, students are able to use the learning resources and materials for multiple purposes	.385	.006
5c	In the class, grades are given for group effort, rather than individual effort	.383	.006
4b	On Facebook/ Twitter pages, students are able to explore issues from different points of view	.351	.012
8c	The class instructor is available to provide contextualized support in the classroom	.333	.018
9e	Students are assessed on the result of the learning process while on Facebook/ Twitter	.330	.019
5b	On Facebook/ Twitter pages, students are able to collaborate on tasks	.320	.024
3f	On Facebook/ Twitter pages, students are able to hear and share stories about professional practice	.314	.027
8b	More knowledgeable students are able to assist with tutoring on social media outlets like Facebook/ Twitter	.283	.047

Note. N = 50. Class or classroom = English 101/102 class

I calculated a Pearson product correlation to assess the relationship between the students' perceptions of their ability to hear and share stories about professional practice on Facebook/ Twitter pages and their other authentic learning tasks. Overall, there was a strong, positive correlation between students' perceptions of their ability to hear and share stories about professional practice on Facebook/ Twitter pages and Learning

Element 4b. I observed a medium, positive correlation between Learning Element 3f and 10 other variables. I noted a small, positive correlation between Learning Element 3f and 6 other variables. See Table 14 for specific correlation values and *p* values.

Table 14

Significant Correlations – Learning Element 3f: On Facebook/ Twitter pages, students are able to hear and share stories about professional practice

Learning Element #	Variable	R	*p*
4b	On Facebook/ Twitter pages, students are able to explore issues from different points of view	.504	.000
5b	On Facebook/ Twitter pages, students are able to collaborate on tasks	.479	.000
7d	Students complete tasks on Facebook/ Twitter that enable groups and forums the chance to discuss ideas	.467	.001
6d	In the class, students work in collaborative groups that enable discussion and social reflection on Facebook/ Twitter	.391	.005
7f	Students complete tasks on Facebook/ Twitter that enable discussion and defense of arguments	.390	.006
9e	Students are assessed on the result of the learning process while on Facebook/ Twitter	.389	.005
4d	On Facebook/ Twitter pages, students are able to use the learning resources and materials for multiple purposes	.359	.011
7	Students are required to discuss and explain beliefs and gain a growing understanding of the real world in class	.356	.011
7c	Students complete tasks in class that enable groups and forums the chance to discuss ideas	.345	.014
9c	Students participate in various activities for extended periods of time on your Facebook/ Twitter pages	.333	.018
9f	The class instructor uses multiple assessment measures rather than a single measure in class	.309	.029
8b	More knowledgeable students are able to assist with tutoring on social media outlets like Facebook/ Twitter	.297	.036
9d	Students are assessed on the result of the learning process while in class	.297	.036
6	Students are required to make decisions about how to complete the task, with some thought and reflective writing through Facebook/ Twitter	.291	.040
9b	Students participate in various activities for extended periods of time in your class	.291	.040
4	In the classroom, students are able to explore issues from different points of view	.289	.042
8	More knowledgeable students are able to assist with tutoring in the classroom.	.286	.044

Note. N = 50. Class or classroom = English 101/102 class

Authentic Learning Element 4

The Authentic Learning Element 4 related to providing access to expert performances and the modelling of processes. I calculated a Pearson product correlation to assess the relationship between the students' perceptions of their ability to explore

issues from different points of view in an English 101/102 classroom and their other authentic learning tasks. Overall, there was a strong, positive correlation between students' perceptions of their ability to explore issues from different points of view in an English 101/102 classroom and Learning Elements 5, 7, 4c, 7e, 8, 9, 9f, and 6. I observed a medium, positive correlation between Learning Element 4 and 12 other variables. I noted a small, positive correlation between Learning Element 4 and 3 other variables. See Table 15 for specific correlation values and *p* values.

Table 15

Significant Correlations – Learning Element 4: In English 101/102 classroom, students are able to explore issues from different points of view

Learning Element #	Variable	R	*p*
5	In the classroom, students are able to collaborate	.741	.000
7	Students are required to discuss and explain beliefs and gain a growing understanding of the real world in class	.652	.000
4c	In the classroom, students are able to use the learning resources and materials for multiple purposes	.649	.000
7e	Students complete tasks in class that enable discussion and defense of arguments	.621	.000
8	More knowledgeable students are able to assist with tutoring in the classroom.	.596	.000
9	Students are assessed on the result of the learning process while in class	.552	.000
9f	The class instructor uses multiple assessment measures rather than a single measure in class	.530	.000
6	Students are required to make decisions about how to complete the task, with some thought and reflective writing through Facebook/ Twitter	.521	.000
9d	Students are assessed on the result of the learning process while in class	.451	.001
4d	On Facebook/ Twitter pages, students are able to use the learning resources and materials for multiple purposes	.436	.002
6b	In the classroom and Facebook/ Twitter pages, students are able to move freely in the environment and return to any page upon reflection	.406	.003
4b	On Facebook/ Twitter pages, students are able to explore issues from different points of view	.399	.004
6d	In the class, students work in collaborative groups that enable discussion and social reflection on Facebook/ Twitter	.395	.004
8c	The class instructor is available to provide contextualized support in the classroom	.387	.005
6c	Students compare thoughts and ideas to peers, teachers, and to others on Facebook/ Twitter	.374	.008
7c	Students complete tasks in class that enable groups and forums the chance to discuss ideas	.364	.009
8d	The class instructor is available to provide contextualized support on social media outlets like Facebook/ Twitter	.332	.019
9g	The class instructor uses multiple assessment measures rather than a single measure on Facebook/ Twitter	.329	.020
7f	Students complete tasks on Facebook/ Twitter that enable discussion and defense of arguments	.313	.029
9c	Students participate in various activities for extended periods of time on your Facebook/ Twitter pages	.309	.029
8b	More knowledgeable students are able to assist with tutoring on social media outlets like Facebook/ Twitter	.296	.037
9b	Students participate in various activities for extended periods of time in your class	.287	.044
5c	In class, grades are given for group effort, rather than individual effort	.281	.048

Note. N = 50. Class or classroom = English 101/102 class

I calculated a Pearson product correlation to assess the relationship between the students' perceptions of their ability to explore issues from different points of view on Facebook/ Twitter pages and their other authentic learning tasks. Overall, there was a strong, positive correlation between students' perceptions of their ability to explore issues

from different points of view on Facebook/ Twitter pages and Learning Elements 9, 9d, 4d, 7f, 8, and 9f. I observed a medium, positive correlation between Learning Element 4b and 16 other variables. See Table 16 for specific correlation values and *p* values.

Table 16

Significant Correlations – Learning Element 4b: On Facebook/ Twitter pages, students are able to explore issues from different points of view

Learning Element #	Variable	R	*p*
9	Students are assessed on the result of the learning process while in class	.617	.000
9d	Students are assessed on the result of the learning process while in class	.613	.000
4d	On Facebook/ Twitter pages, students are able to use the learning resources and materials for multiple purposes	.601	.000
7f	Students complete tasks on Facebook/ Twitter that enable discussion and defense of arguments	.568	.000
8	More knowledgeable students are able to assist with tutoring in the classroom.	.566	.000
9f	The class instructor uses multiple assessment measures rather than a single measure in class	.563	.000
8c	The class instructor is available to provide contextualized support in the classroom	.498	.000
5	In the classroom, students are able to collaborate	.491	.000
7e	Students complete tasks in class that enable discussion and defense of arguments	.476	.000
5b	On Facebook/ Twitter pages, students are able to collaborate on tasks	.448	.001
7d	Students complete tasks on Facebook/ Twitter that enable groups and forums the chance to discuss ideas	.434	.002
9b	Students participate in various activities for extended periods of time in your class	.426	.002
7	Students are required to discuss and explain beliefs and gain a growing understanding of the real world in class	.423	.002
4c	In the classroom, students are able to use the learning resources and materials for multiple purposes	.397	.004
8b	More knowledgeable students are able to assist with tutoring on social media outlets like Facebook/ Twitter	.397	.004
6c	Students compare thoughts and ideas to peers, teachers, and to others on Facebook/ Twitter	.396	.004
9c	Students participate in various activities for extended periods of time on your Facebook/ Twitter pages	.387	.005
7c	Students complete tasks in class that enable groups and forums the chance to discuss ideas	.378	.007
6b	In the classroom and Facebook/ Twitter pages, students are able to move freely in the environment and return to any page upon reflection	.340	.016
8d	The class instructor is available to provide contextualized support on social media outlets like Facebook/ Twitter	.323	.022
6	Students are required to make decisions about how to complete the task, with some thought and reflective writing through Facebook/ Twitter	.318	.024
9e	Students are assessed on the result of the learning process while on Facebook/ Twitter	.305	.031

Note. N = 50. Class or classroom = English 101/102 class

I calculated a Pearson product correlation to assess the relationship between the students' perceptions of their ability to use the learning resources and materials for multiple purposes in an English 101/102 classroom and their other authentic learning tasks. Overall, there was a strong, positive correlation between students' perceptions of their ability to use the learning resources and materials for multiple purposes in an English 101/102 classroom and Learning Elements 5, 9f, 7, 7e, and 6b. I observed a medium, positive correlation between Learning Element 4c and 13 other variables. See Table 17 for specific correlation values and *p* values.

Table 17

Significant Correlations – Learning Element 4c: In English 101/102 classroom, students are able to use the learning resources and materials for multiple purposes

Learning Element #	Variable	R	*p*
5	In the classroom, students are able to collaborate	.650	.000
9f	The class instructor uses multiple assessment measures rather than a single measure in class	.536	.000
7	Students are required to discuss and explain beliefs and gain a growing understanding of the real world in class	.527	.000
7e	Students complete tasks in class that enable discussion and defense of arguments	.513	.000
6b	In the classroom and Facebook/ Twitter pages, students are able to move freely in the environment and return to any page upon reflection	.502	.000
9	Students are assessed on the result of the learning process while in class	.491	.000
8	More knowledgeable students are able to assist with tutoring in the classroom.	.472	.001
9b	Students participate in various activities for extended periods of time in your class	.447	.001
9d	Students are assessed on the result of the learning process while in class	.422	.022
5c	In the class, grades are given for group effort, rather than individual effort	.417	.003
8c	The class instructor is available to provide contextualized support in the classroom	.389	.005
8d	The class instructor is available to provide contextualized support on social media outlets like Facebook/ Twitter	.338	.016
9g	The class instructor uses multiple assessment measures rather than a single measure on Facebook/ Twitter	.334	.018
6	Students are required to make decisions about how to complete the task, with some thought and reflective writing through Facebook/ Twitter	.327	.020
9c	Students participate in various activities for extended periods of time on your Facebook/ Twitter pages	.324	.022
7c	Students complete tasks in class that enable groups and forums the chance to discuss ideas	.319	.024
4d	On Facebook/ Twitter pages, students are able to use the learning resources and materials for multiple purposes	.316	.025
8b	More knowledgeable students are able to assist with tutoring on social media outlets like Facebook/ Twitter	.303	.033

Note. N = 50. Class or classroom = English 101/102 class

I calculated a Pearson product correlation to assess the relationship between the students' perceptions of their ability to use the learning resources and materials for multiple purposes on Facebook/ Twitter pages and their other authentic learning tasks. Overall, there was a strong, positive correlation between students' perceptions of their ability to use the learning resources and materials for multiple purposes on Facebook/ Twitter pages and Learning Elements 9, 9d, 5b, and 8. A medium, positive correlation was observed between Learning Element 4d and 11 other variables. I noted a small, positive correlation between Learning Element 4d and 1 other variable. See Table 18 for specific correlation values and *p* values.

Table 18

Significant Correlations – Learning Element 4d: On Facebook/ Twitter pages, students are able to use the learning resources and materials for multiple purposes

Learning Element #	Variable	R	*p*
9	Students are assessed on the result of the learning process while in class	.595	.000
9d	Students are assessed on the result of the learning process while in class	.590	.000
5b	On Facebook/ Twitter pages, students are able to collaborate on tasks	.560	.000
8	More knowledgeable students are able to assist with tutoring in the classroom.	.506	.000
9f	The class instructor uses multiple assessment measures rather than a single measure in class	.488	.000
7f	Students complete tasks on Facebook/ Twitter that enable discussion and defense of arguments	.440	.002
5	In the classroom, students are able to collaborate	.430	.002
9b	Students participate in various activities for extended periods of time in your class	.426	.002
8d	The class instructor is available to provide contextualized support on social media outlets like Facebook/ Twitter	.405	.003
7	Students are required to discuss and explain beliefs and gain a growing understanding of the real world in class	.399	.004
8	The class instructor is available to provide contextualized support in the classroom	.398	.004
7d	Students complete tasks on Facebook/ Twitter that enable groups and forums the chance to discuss ideas	.364	.009
7c	Students complete tasks in class that enable groups and forums the chance to discuss ideas	.334	.018
9c	Students participate in various activities for extended periods of time on your Facebook/ Twitter pages	.312	.028
8b	More knowledgeable students are able to assist with tutoring on social media outlets like Facebook/ Twitter	.287	.043

Note. N = 50. Class or classroom = English 101/102 class

Authentic Learning Element 5

The Authentic Learning Element 5 related to supporting collaborative construction of knowledge. I calculated a Pearson product correlation to assess the relationship between the students' perceptions of their ability to collaborate in English 101/102 classroom and their other authentic learning tasks. Overall, there was a strong, positive correlation between students' perceptions of their ability to collaborate in English 101/102 classroom and Learning Elements 7, 9d, 7e, 8c, 8, 8, 9, and 6b. I observed a medium, positive correlation between Learning Element 5 and 9 other variables. See Table 19 for specific correlation values and *p* values.

Table 19

Significant Correlations – Learning Element 5: In English 101/102 classroom, students are able to collaborate

Learning Element #	Variable	R	*p*
7	Students are required to discuss and explain beliefs and gain a growing understanding of the real world in class	.696	.000
9d	Students are assessed on the result of the learning process while in class	.644	.000
7e	Students complete tasks in class that enable discussion and defense of arguments	.621	.000
8c	The class instructor is available to provide contextualized support in the classroom	.606	.000
8	More knowledgeable students are able to assist with tutoring in the classroom.	.595	.000
8	Students are assessed on the result of the learning process while in class	.582	.000
9	The class instructor uses multiple assessment measures rather than a single measure in class	.569	.000
6b	In the classroom and Facebook/ Twitter pages, students are able to move freely in the environment and return to any page upon reflection	.554	.000
8d	The class instructor is available to provide contextualized support on social media outlets like Facebook/ Twitter	.450	.001
9g	The class instructor uses multiple assessment measures rather than a single measure on Facebook/ Twitter	.440	.001
6	Students are required to make decisions about how to complete the task, with some thought and reflective writing through Facebook/ Twitter	.437	.002
9c	Students participate in various activities for extended periods of time on your Facebook/ Twitter pages	.430	.002
9b	Students participate in various activities for extended periods of time in your class	.409	.003
7c	Students complete tasks in class that enable groups and forums the chance to discuss ideas	.396	.004
6c	Students compare thoughts and ideas to peers, teachers, and to others on Facebook/ Twitter	.381	.006
7d	Students complete tasks on Facebook/ Twitter that enable groups and forums the chance to discuss ideas	.364	.009
5c	In class, grades are given for group effort, rather than individual effort	.315	.026

Note. N = 50. Class or classroom = English 101/102 class

I calculated a Pearson product correlation to assess the relationship between the students' perceptions of their ability to collaborate on Facebook/ Twitter pages and their other authentic learning tasks. Overall, there was no strong, positive correlation between students' perceptions of their ability to collaborate on Facebook/ Twitter pages and the other Learning Elements. I observed a medium, positive correlation between Learning Element 5b and 11 other variables. See Table 20 for specific correlation values and *p* values.

Table 20

Significant Correlations – Learning Element 5b: On Facebook/ Twitter pages, students are able to collaborate on tasks

Learning Element #	Variable	R	*p*
9d	Students are assessed on the result of the learning process while in class	.437	.002
7f	Students complete tasks on Facebook/ Twitter that enable discussion and defense of arguments	.432	.002
6c	Students compare thoughts and ideas to peers, teachers, and to others on Facebook/ Twitter	.427	.002
8d	The class instructor is available to provide contextualized support on social media outlets like Facebook/ Twitter	.374	.008
7b	Students are required to discuss and explain beliefs and gain a growing understanding of the real world on Facebook/Twitter pages	.366	.009
9e	Students are assessed on the result of the learning process while on Facebook/ Twitter	.360	.010
6d	In the class, students work in collaborative groups that enable discussion and social reflection on Facebook/ Twitter	.352	.012
8	More knowledgeable students are able to assist with tutoring in the classroom.	.334	.018
9c	Students participate in various activities for extended periods of time on your Facebook/ Twitter pages	.333	.018
8b	More knowledgeable students are able to assist with tutoring on social media outlets like Facebook/ Twitter	.330	.019
9g	The class instructor uses multiple assessment measures rather than a single measure on Facebook/ Twitter	.311	.028

Note. N = 50. Class or classroom = English 101/102 class

I calculated a Pearson product correlation to assess the relationship between the students' perceptions of how grades are given for group effort, rather than individual effort in English 101/102 classroom and their other authentic learning tasks. Overall, there was a

strong, positive correlation between students' perceptions of how grades are given for group effort, rather than individual effort in English 101/102 classroom and Learning Element 6. I observed a medium, positive correlation between Learning Element 5c and 7 other variables. I noted a small, positive correlation between Learning Element 5c and 6 other variables. See Table 21 for specific correlation values and *p* values.

Table 21

Significant Correlations – Learning Element 5c: In English 101/102 class, grades are given for group effort, rather than individual effort

Learning Element #	Variable	R	*p*
6	Students are required to make decisions about how to complete the task, with some thought and reflective writing through Facebook/ Twitter	.515	.000
9g	The class instructor uses multiple assessment measures rather than a single measure on Facebook/ Twitter	.483	.000
9e	Students are assessed on the result of the learning process while on Facebook/ Twitter	.482	.000
8d	The class instructor is available to provide contextualized support on social media outlets like Facebook/ Twitter	.450	.001
6c	Students compare thoughts and ideas to peers, teachers, and to others on Facebook/ Twitter	.416	.003
8c	The class instructor is available to provide contextualized support in the classroom	.341	.015
6b	In the classroom and Facebook/ Twitter pages, students are able to move freely in the environment and return to any page upon reflection	.325	.021
7c	Students complete tasks in class that enable groups and forums the chance to discuss ideas	.325	.021
6d	In the class, students work in collaborative groups that enable discussion and social reflection on Facebook/ Twitter	.299	.035
7	Students are required to discuss and explain beliefs and gain a growing understanding of the real world in class	.293	.039
7d	Students complete tasks on Facebook/ Twitter that enable groups and forums the chance to discuss ideas	.290	.041
8	More knowledgeable students are able to assist with tutoring in the classroom.	.290	.041
9d	Students are assessed on the result of the learning process while in class	.290	.041
8b	More knowledgeable students are able to assist with tutoring on social media outlets like Facebook/ Twitter	.282	.047

Note. N = 50. Class or classroom = English 101/102 class

Authentic Learning Element 6

The Authentic Learning Element 6 related to promoting reflection. I calculated a Pearson product correlation to assess the relationship between the students' perceptions of how students are required to make decisions about how to complete the task, with

some thought and reflective writing through Facebook/ Twitter and their other authentic learning tasks. Overall, there was a strong, positive correlation between students' perceptions of how students are required to make decisions about how to complete the task, with some thought and reflective writing through Facebook/ Twitter and Learning Element and 6c, 9e, and 6d. I observed a medium, positive correlation between Learning Element 6 and 5 other variables. I noted a small, positive correlation between Learning Element 6 and 1 other variables. See Table 22 for specific correlation values and *p* values.

Table 22

Significant Correlations – Learning Element 6: Students are required to make decisions about how to complete the task, with some thought and reflective writing through Facebook/ Twitter

Learning Element #	Variable	R	*p*
6c	Students compare thoughts and ideas to peers, teachers, and to others on Facebook/ Twitter	.642	.000
9e	Students are assessed on the result of the learning process while on Facebook/ Twitter	.616	.000
6d	In the class, students work in collaborative groups that enable discussion and social reflection on Facebook/ Twitter	.577	.000
8d	The class instructor is available to provide contextualized support on social media outlets like Facebook/ Twitter	.472	.001
9g	The class instructor uses multiple assessment measures rather than a single measure on Facebook/ Twitter	.470	.001
9	Students are assessed on the result of the learning process while in class	.464	.001
8	More knowledgeable students are able to assist with tutoring in the classroom.	.416	.003
9c	Students participate in various activities for extended periods of time on your Facebook/ Twitter pages	.322	.022
9d	Students are assessed on the result of the learning process while in class	.294	.038

Note. N = 50. Class or classroom = English 101/102 class

I calculated a Pearson product correlation to assess the relationship between the students' perceptions of how students are able to move freely in the environment and return to any page upon reflection in English 101/102 classroom and Facebook/ Twitter pages and their other authentic learning tasks. Overall, there was a strong, positive

correlation between students' perceptions of how students are able to move freely in the environment and return to any page upon reflection in English 101/102 classroom and Facebook/ Twitter pages and Learning Element and 9f, 8c, 9d, and 7c. I observed a medium, positive correlation between Learning Element 6b and 7 other variables. I noted a small, positive correlation between Learning Element 6b and one other variable. See Table 23 for specific correlation values and *p* values.

Table 23

Significant Correlations – Learning Element 6b: In English 101/102 classroom and Facebook/ Twitter pages, students are able to move freely in the environment and return to any page upon reflection

Learning Element #	Variable	R	*p*
9f	The class instructor uses multiple assessment measures rather than a single measure in class	.619	.000
8c	The class instructor is available to provide contextualized support in the classroom	.567	.000
9d	Students are assessed on the result of the learning process while in class	.543	.000
7c	Students complete tasks in class that enable groups and forums the chance to discuss ideas	.518	.000
9g	The class instructor uses multiple assessment measures rather than a single measure on Facebook/ Twitter	.442	.001
7e	Students complete tasks in class that enable discussion and defense of arguments	.433	.002
7	Students are required to discuss and explain beliefs and gain a growing understanding of the real world in class	.405	.004
8d	The class instructor is available to provide contextualized support on social media outlets like Facebook/ Twitter	.391	.005
8	More knowledgeable students are able to assist with tutoring in the classroom.	.382	.006
9	Students are assessed on the result of the learning process while in class	.345	.014
9b	Students participate in various activities for extended periods of time in your class	.308	.030
8b	More knowledgeable students are able to assist with tutoring on social media outlets like Facebook/ Twitter	.284	.046

Note. N = 50. Class or classroom = English 101/102 class

I calculated a Pearson product correlation to assess the relationship between the students' perceptions of how students compare thoughts and ideas to peers, teachers, and to others on Facebook/ Twitter and their other authentic learning tasks. Overall, there was no strong, positive correlation between students' perceptions of how students compare thoughts and ideas to peers, teachers, and to others on Facebook/ Twitter and the other

Learning Elements. I observed a medium, positive correlation between Learning Element 6c and 6 other variables. I noted a small, positive correlation between Learning Element 6c and 1 other variable1. See Table 24 for specific correlation values and *p* values.

Table 24

Significant Correlations – Learning Element 6c: Students compare thoughts and ideas to peers, teachers, and to others on Facebook/ Twitter

Learning Element #	Variable	R	*p*
6d	In class, students work in collaborative groups that enable discussion and social reflection on Facebook/ Twitter	.459	.001
9e	Students are assessed on the result of the learning process while on Facebook/ Twitter	.458	.001
9g	The class instructor uses multiple assessment measures rather than a single measure on Facebook/ Twitter	.402	.004
9	Students are assessed on the result of the learning process while in class	.372	.008
8d	The class instructor is available to provide contextualized support on social media outlets like Facebook/ Twitter	.364	.009
9d	Students are assessed on the result of the learning process while in class	.314	.026
9c	Students participate in various activities for extended periods of time on your Facebook/ Twitter pages	.288	.042

Note. N = 50. Class or classroom = English 101/102 class

I calculated a Pearson product correlation to assess the relationship between the students' perceptions of how students work in collaborative groups that enable discussion and social reflection on Facebook/ Twitter while in English 101/102 class and their other authentic learning tasks. Overall, there was a strong, positive correlation between students' perceptions of how students work in collaborative groups that enable discussion and social reflection on Facebook/ Twitter while in English 101/102 class and Learning Element 9e. I observed a medium, positive correlation between Learning Element 6d and 8 other variables. I noted a small, positive correlation between Learning Element 6d and 1 other variable. See Table 25 for specific correlation values and *p* values.

Table 25

Significant Correlations – Learning Element 6d: In English 101/102 class, students work in collaborative groups that enable discussion and social reflection on Facebook/ Twitter

Learning Element #	Variable	R	*p*
9e	Students are assessed on the result of the learning process while on Facebook/ Twitter	.515	.000
8d	The class instructor is available to provide contextualized support on social media outlets like Facebook/ Twitter	.416	.003
9	Students are assessed on the result of the learning process while in class	.364	.009
9c	Students participate in various activities for extended periods of time on your Facebook/ Twitter pages	.364	.009
8b	More knowledgeable students are able to assist with tutoring on social media outlets like Facebook/ Twitter	.328	.020
7d	Students complete tasks on Facebook/ Twitter that enable groups and forums the chance to discuss ideas	.322	.023
7f	Students complete tasks on Facebook/ Twitter that enable discussion and defense of arguments	.311	.030
7b	Students are required to discuss and explain beliefs and gain a growing understanding of the real world on Facebook/Twitter pages	.306	.030
7e	Students complete tasks in class that enable discussion and defense of arguments	.303	.032
9g	The class instructor uses multiple assessment measures rather than a single measure on Facebook/ Twitter	.283	.046

Note. N = 50. Class or classroom = English 101/102 class

Authentic Learning Element 7

The Authentic Learning Element 7 related to promoting articulation. I calculated a Pearson product correlation to assess the relationship between the students' perceptions of how students are required to discuss and explain beliefs and gain a growing understanding of the real world in English 101/102 and their other authentic learning tasks. Overall, there was a strong, positive correlation between students' perceptions of how students are required to discuss and explain beliefs and gain a growing understanding of the real world in English 101/102 and Learning Element 7e, 9f, 8, 9b, 9d, and 7c. I observed a medium, positive correlation between Learning Element 7 and 7 other variables. See Table 26 for specific correlation values and *p* values.

Table 26

Significant Correlations – Learning Element 7: In English 101/102 class, students work in collaborative groups that enable discussion and social reflection on Facebook/ Twitter

Learning Element #	Variable	R	*p*
7e	Students complete tasks in class that enable discussion and defense of arguments	.709	.000
9f	The class instructor uses multiple assessment measures rather than a single measure in class	.621	.000
8	More knowledgeable students are able to assist with tutoring in the classroom.	.591	.000
9b	Students participate in various activities for extended periods of time in your class	.577	.491
9d	Students are assessed on the result of the learning process while in class	.520	.000
7c	Students complete tasks in class that enable groups and forums the chance to discuss ideas	.507	.000
9c	Students participate in various activities for extended periods of time on your Facebook/ Twitter pages	.491	.000
9	Students are assessed on the result of the learning process while in class	.476	.000
8c	The class instructor is available to provide contextualized support in the classroom	.451	.001
8d	The class instructor is available to provide contextualized support on social media outlets like Facebook/ Twitter	.443	.001
7d	Students complete tasks on Facebook/ Twitter that enable groups and forums the chance to discuss ideas	.426	.002
8b	More knowledgeable students are able to assist with tutoring on social media outlets like Facebook/ Twitter	.411	.003
7f	Students complete tasks on Facebook/ Twitter that enable discussion and defense of arguments	.353	.013

Note. N = 50. Class or classroom = English 101/102 class

I calculated a Pearson product correlation to assess the relationship between the students' perceptions of how students are required to discuss and explain beliefs and gain a growing understanding of the real world on Facebook/Twitter pages and their other authentic learning tasks. Overall, there was no strong, positive correlation between students' perceptions of how students are required to discuss and explain beliefs and gain a growing understanding of the real world on Facebook/Twitter pages and the other Learning Elements. I observed a medium, positive correlation between Learning Element 7b and 7 other variables. I noted a small, positive correlation was noted between Learning Element 7b and 1 other variable. See Table 27 for specific correlation values and *p* values.

Table 27

Significant Correlations – Learning Element 7b: Students are required to discuss and explain beliefs and gain a growing understanding of the real world on Facebook/Twitter pages

Learning Element #	Variable	R	*p*
8d	The class instructor is available to provide contextualized support on social media outlets like Facebook/ Twitter	.477	.000
8b	More knowledgeable students are able to assist with tutoring on social media outlets like Facebook/ Twitter	.457	.001
9c	Students participate in various activities for extended periods of time on your Facebook/ Twitter pages	.417	.003
7e	Students complete tasks in class that enable discussion and defense of arguments	.394	.005
7f	Students complete tasks on Facebook/ Twitter that enable discussion and defense of arguments	.374	.008
9d	Students are assessed on the result of the learning process while in class	.373	.008
7d	Students complete tasks on Facebook/ Twitter that enable groups and forums the chance to discuss ideas	.305	.031
9e	Students are assessed on the result of the learning process while on Facebook/ Twitter	.285	.045

Note. N = 50. Class or classroom = English 101/102 class

I calculated a Pearson product correlation to assess the relationship between the students' perceptions of how students complete tasks in English 101/102 that enable groups and forums the chance to discuss ideas and their other authentic learning tasks. Overall, there was a strong, positive correlation between students' perceptions of how students complete tasks in English 101/102 that enable groups and forums the chance to discuss ideas and Learning Element 8, 9, and 7f. I observed a medium, positive correlation between Learning Element 7c and 8 other variables. I noted a small, positive correlation between Learning Element 7c and 2 other variables. See Table 28 for specific correlation values and *p* values.

Table 28

Significant Correlations – Learning Element 7c: Students complete tasks in English 101/102 that enable groups and forums the chance to discuss ideas

Learning Element #	Variable	R	*p*
8	More knowledgeable students are able to assist with tutoring in the classroom.	.543	.000
9	Students are assessed on the result of the learning process while in class	.534	.000
7f	Students complete tasks on Facebook/ Twitter that enable discussion and defense of arguments	.530	.000
8c	The class instructor is available to provide contextualized support in the classroom	.488	.000
9d	Students are assessed on the result of the learning process while in class	.486	.000
9f	The class instructor uses multiple assessment measures rather than a single measure in class	.474	.001
7e	Students complete tasks in class that enable discussion and defense of arguments	.394	.005
9b	Students participate in various activities for extended periods of time in your class	.376	.007
9g	The class instructor uses multiple assessment measures rather than a single measure on Facebook/ Twitter	.375	.007
7d	Students complete tasks on Facebook/ Twitter that enable groups and forums the chance to discuss ideas	.355	.011
8d	The class instructor is available to provide contextualized support on social media outlets like Facebook/ Twitter	.323	.022
8b	More knowledgeable students are able to assist with tutoring on social media outlets like Facebook/ Twitter	.290	.041
9e	Students are assessed on the result of the learning process while on Facebook/ Twitter	.289	.042

Note. N = 50. Class or classroom = English 101/102 class

I calculated a Pearson product correlation to assess the relationship between the students' perceptions of how students complete tasks on Facebook/ Twitter that enable groups and forums the chance to discuss ideas and their other authentic learning tasks. Overall, there was a strong, positive correlation between students' perceptions of how students complete tasks on Facebook/ Twitter that enable groups and forums the chance to discuss ideas and Learning Element 7f. I observed a medium, positive correlation between Learning Element 7d and 7 other variables. I noted a small, positive correlation between Learning Element 7d and 1 other variable. See Table 29 for specific correlation values and *p* values.

Table 29

Significant Correlations – Learning Element 7d: Students complete tasks on Facebook/ Twitter that enable groups and forums the chance to discuss ideas

Learning Element #	Variable	R	*p*
7f	Students complete tasks on Facebook/ Twitter that enable discussion and defense of arguments	.511	.000
8	More knowledgeable students are able to assist with tutoring in the classroom.	.459	.001
8d	The class instructor is available to provide contextualized support on social media outlets like Facebook/ Twitter	.402	.004
9e	Students are assessed on the result of the learning process while on Facebook/ Twitter	.390	.005
8b	More knowledgeable students are able to assist with tutoring on social media outlets like Facebook/ Twitter	.357	.011
9	Students are assessed on the result of the learning process while in class	.318	.024
9c	Students participate in various activities for extended periods of time on your Facebook/ Twitter pages	.316	.025
9d	Students are assessed on the result of the learning process while in class	.305	.031
9f	The class instructor uses multiple assessment measures rather than a single measure in class	.279	.050

Note. N = 50. Class or classroom = English 101/102 class

I calculated a Pearson product correlation to assess the relationship between the students' perceptions of how students complete tasks in English 101/102 that enable discussion and defense of arguments and their other authentic learning tasks. Overall, there was a strong, positive correlation between students' perceptions of how students complete tasks in English 101/102 that enable discussion and defense of arguments and Learning Elements 9f, 8, and 9d. I observed a medium, positive correlation was observed between Learning Element 7e and 8 other variables. See Table 30 for specific correlation values and *p* values.

Table 30

Significant Correlations – Learning Element 7e: Students complete tasks in English 101/102 that enable discussion and defense of arguments

Learning Element #	Variable	R	*p*
9f	The class instructor uses multiple assessment measures rather than a single measure in class	.564	.000
8	More knowledgeable students are able to assist with tutoring in the classroom.	.563	.000
9d	Students are assessed on the result of the learning process while in class	.510	.000
8b	More knowledgeable students are able to assist with tutoring on social media outlets like Facebook/ Twitter	.482	.000
9	Students are assessed on the result of the learning process while in class	.477	.000
8c	The class instructor is available to provide contextualized support in the classroom	.418	.003
8d	The class instructor is available to provide contextualized support on social media outlets like Facebook/ Twitter	.397	.004
9c	Students participate in various activities for extended periods of time on your Facebook/ Twitter pages	.382	.006
9g	The class instructor uses multiple assessment measures rather than a single measure on Facebook/ Twitter	.359	.011
7f	Students complete tasks on Facebook/ Twitter that enable discussion and defense of arguments	.357	.012
9b	Students participate in various activities for extended periods of time in your class	.338	.016

Note. N = 50. Class or classroom = English 101/102 class

I calculated a Pearson product correlation to assess the relationship between the students' perceptions of how students complete tasks on Facebook/ Twitter that enable discussion and defense of arguments and their other authentic learning tasks. Overall, there was a strong, positive correlation between students' perceptions of how students complete tasks on Facebook/ Twitter that enable discussion and defense of arguments and Learning Elements 9 and 8. I observed a medium, positive correlation between Learning Element 7f and 5 other variables. See Table 31 for specific correlation values and *p* values.

Table 31

Significant Correlations – Learning Element 7f: Students complete tasks on Facebook/ Twitter that enable discussion and defense of arguments

Learning Element #	Variable	R	*p*
9	Students are assessed on the result of the learning process while in class	.577	.000
8	More knowledgeable students are able to assist with tutoring in the classroom.	.541	.000
8b	More knowledgeable students are able to assist with tutoring on social media outlets like Facebook/ Twitter	.469	.001
9d	Students are assessed on the result of the learning process while in class	.446	.001
9c	Students participate in various activities for extended periods of time on your Facebook/ Twitter pages	.400	.004
9f	The class instructor uses multiple assessment measures rather than a single measure in class	.397	.005
9b	Students participate in various activities for extended periods of time in your class	.303	.034

Note. N = 50. Class or classroom = English 101/102 class

Authentic Learning Element 8

The Authentic Learning Element 8 related to providing coaching and scaffolding. I calculated a Pearson product correlation to assess the relationship between the students' perceptions of allowing more knowledgeable students are able to assist with tutoring in the English 101/102 classroom and their other authentic learning tasks. Overall, there was a strong, positive correlation between students' perceptions of allowing more knowledgeable students are able to assist with tutoring in the English 101/102 classroom and Learning Elements 9d, 9, 8c, and 9f. I observed a medium, positive correlation between Learning Element 8 and 4 other variables. See Table 32 for specific correlation values and *p* values.

Table 32

Significant Correlations – Learning Element 8: More knowledgeable students are able to assist with tutoring in the English 101/102 classroom.

Learning Element #	Variable	R	*p*
9d	Students are assessed on the result of the learning process while in class	.689	.000
9	Students are assessed on the result of the learning process while in class	.675	.000
8c	The class instructor is available to provide contextualized support in the classroom	.653	.000
9f	The class instructor uses multiple assessment measures rather than a single measure in class	.518	.000
8d	The class instructor is available to provide contextualized support on social media outlets like Facebook/ Twitter	.468	.001
9c	Students participate in various activities for extended periods of time on your Facebook/ Twitter pages	.418	.003
9b	Students participate in various activities for extended periods of time in your class	.381	.006
9g	The class instructor uses multiple assessment measures rather than a single measure on Facebook/ Twitter	.340	.016

Note. N = 50. Class or classroom = English 101/102 class

I calculated a Pearson product correlation to assess the relationship between the students' perceptions of allowing more knowledgeable students are able to assist with tutoring on social media outlets like Facebook/ Twitter and their other authentic learning tasks. Overall, there was no strong, positive correlation between students' perceptions of allowing more knowledgeable students are able to assist with tutoring on social media outlets like Facebook/ Twitter and the other Learning Elements. I observed a medium, positive correlation between Learning Element 8b and 6 other variables. See Table 33 for specific correlation values and *p* values.

Table 33

Significant Correlations – Learning Element 8b: More knowledgeable students are able to assist with tutoring on social media outlets like Facebook/ Twitter

Learning Element #	Variable	R	*p*
9d	Students are assessed on the result of the learning process while in class	.456	.001
8d	The class instructor is available to provide contextualized support on social media outlets like Facebook/ Twitter	.439	.001
9c	Students participate in various activities for extended periods of time on your Facebook/ Twitter pages	.372	.008
9b	Students participate in various activities for extended periods of time in your class	.346	.014
9f	The class instructor uses multiple assessment measures rather than a single measure in class	.334	.018
9	Students are assessed on the result of the learning process while in class	.326	.021

Note. N = 50. Class or classroom = English 101/102 class

I calculated a Pearson product correlation to assess the relationship between the students' perceptions of the English 101/102 instructor is available to provide contextualized support in the classroom and their other authentic learning tasks. Overall, there was a strong, positive correlation between students' perceptions of the English 101/102 instructor is available to provide contextualized support in the classroom and Learning Elements 9d, 9, and 9f. I observed a medium, positive correlation between Learning Element 8c and 3 other variables. I noted a small, positive correlation between Learning Element 8c and 1 other variable. See Table 34 for specific correlation values and *p* values.

Table 34

Significant Correlations – Learning Element 8c: The English 101/102 instructor is available to provide contextualized support in the classroom

Learning Element #	Variable	R	*p*
9d	Students are assessed on the result of the learning process while in class	.727	.000
9	Students are assessed on the result of the learning process while in class	.562	.000
9f	The class instructor uses multiple assessment measures rather than a single measure in class	.505	.000
9g	The class instructor uses multiple assessment measures rather than a single measure on Facebook/ Twitter	.365	.009
9b	Students participate in various activities for extended periods of time in your class	.345	.014
8d	The class instructor is available to provide contextualized support on social media outlets like Facebook/ Twitter	.339	.016
9c	Students participate in various activities for extended periods of time on your Facebook/ Twitter pages	.297	.037

Note. N = 50. Class or classroom = English 101/102 class

I calculated a Pearson product correlation to assess the relationship between the students' perceptions of the English 101/102 instructor is available to provide contextualized support on social media outlets like Facebook/ Twitter and their other authentic learning tasks. Overall, there was a strong, positive correlation between students' perceptions of the English 101/102 instructor is available to provide contextualized support on social media outlets like Facebook/ Twitter and Learning Elements 9d. I observed a medium, positive correlation between Learning Element 8d and 4 other variables. See Table 35 for specific correlation values and *p* values.

Table 35

Significant Correlations – Learning Element 8d: The English 101/102 instructor is available to provide contextualized support on social media outlets like Facebook/ Twitter

Learning Element #	Variable	R	*p*
9d	Students are assessed on the result of the learning process while in class	.561	.000
9c	Students participate in various activities for extended periods of time on your Facebook/ Twitter pages	.499	.000
9g	The class instructor uses multiple assessment measures rather than a single measure on Facebook/ Twitter	.450	.001
9e	Students are assessed on the result of the learning process while on Facebook/ Twitter	.440	.001
9	Students are assessed on the result of the learning process while in class	.352	.012

Note. N = 50. Class or classroom = English 101/102 class

Authentic Learning Element 9

The Authentic Learning Element 9 related to providing for authentic assessment of learning within the tasks. I calculated a Pearson product correlation to assess the relationship between the students' perceptions of how students are assessed on the result of the learning process while in English 101/102 and their other authentic learning tasks. Overall, there was a strong, positive correlation between students' perceptions of how students are assessed on the result of the learning process while in English 101/102 and Learning Elements 9d and 9f. I observed a medium, positive correlation between Learning Element 9 and 2 other variables. I noted a small, positive correlation between Learning Element 9 and 1 other variable. See Table 36 for specific correlation values and *p* values.

Table 36

Significant Correlations – Learning Element 9: Students are assessed on the result of the learning process while in English 101/102

Learning Element #	Variable	R	*p*
9d	Students are assessed on the result of the learning process while in class	.669	.000
9f	The class instructor uses multiple assessment measures rather than a single measure in class	.549	.000
9c	Students participate in various activities for extended periods of time on your Facebook/ Twitter pages	.437	.002
9b	Students participate in various activities for extended periods of time in your class	.420	.002
9e	Students are assessed on the result of the learning process while on Facebook/ Twitter	.299	.035

Note. N = 50. Class or classroom = English 101/102 class

I calculated a Pearson product correlation to assess the relationship between the students' perceptions of how students participate in various activities for extended periods of time in your English 101/102 class and their other authentic learning tasks. Overall, there was a strong, positive correlation between students' perceptions of how students participate in various activities for extended periods of time in your English 101/102 class and Learning Element 9f. I observed a medium, positive correlation between Learning Element 9b and 1 other variable. See Table 37 for specific correlation values and *p* values.

Table 37

Significant Correlations – Learning Element 9b: Students participate in various activities for extended periods of time in your English 101/102 class

Learning Element #	Variable	R	*p*
9f	The class instructor uses multiple assessment measures rather than a single measure in class	.638	.000
9d	Students are assessed on the result of the learning process while in class	.398	.004

Note. N = 50. Class or classroom = English 101/102 class

I calculated a Pearson product correlation to assess the relationship between the students' perceptions of how students participate in various activities for extended periods of time on your Facebook/ Twitter pages and their other authentic learning tasks. Overall, there was no strong, positive correlation between students' perceptions of how students participate in various activities for extended periods of time on your Facebook/ Twitter pages and the other Learning Elements. I observed a medium, positive correlation between Learning Element 9c and 3 other variables. See Table 38 for specific correlation values and *p* values.

Table 38

Significant Correlations – Learning Element 9c: Students participate in various activities for extended periods of time on your Facebook/ Twitter pages

Learning Element #	Variable	R	*p*
9d	Students are assessed on the result of the learning process while in class	.452	.001
9e	Students are assessed on the result of the learning process while on Facebook/ Twitter	.352	.012
9f	The class instructor uses multiple assessment measures rather than a single measure in class	.328	.020

Note. N = 50. Class or classroom = English 101/102 class

I calculated a Pearson product correlation to assess the relationship between the students' perceptions of how students are assessed on the result of the learning process while in English 101/102 and their other authentic learning tasks. Overall, there was a strong, positive correlation between students' perceptions of how students are assessed on the result of the learning process while in English 101/102 and Learning Element 9f. I observed a medium, positive correlation between Learning Element 9d and 1 other variable. See Table 39 for specific correlation values and *p* values.

Table 39

Significant Correlations – Learning Element 9d: Students are assessed on the result of the learning process while in English 101/102

Learning Element #	Variable	R	*p*
9f	The class instructor uses multiple assessment measures rather than a single measure in class	.527	.000
9g	The class instructor uses multiple assessment measures rather than a single measure on Facebook/ Twitter	.472	.001

Note. N = 50. Class or classroom = English 101/102 class

I calculated a Pearson product correlation to assess the relationship between the students' perceptions of how students are assessed on the result of the learning process while on Facebook/ Twitter and their other authentic learning tasks. Overall, there was no strong, positive correlation between students' perceptions of how students are assessed on the result of the learning process while on Facebook/ Twitter and the other Learning Elements. I observed a medium, positive correlation between Learning Element 9e and 1 other variable. See Table 40 for specific correlation values and *p* values.

Table 40

Significant Correlations – Learning Element 9e: Students are assessed on the result of the learning process while on Facebook/ Twitter

Learning Element #	Variable	R	*p*
9g	The class instructor uses multiple assessment measures rather than a single measure on Facebook/ Twitter	.453	.001

Note. N = 50. Class or classroom = English 101/102 class

I calculated a Pearson product correlation to assess the relationship between the students' perceptions of how the English 101/102 instructor uses multiple assessment measures rather than a single measure in class and their other authentic learning tasks. Overall, there was no strong, positive correlation between students' perceptions of how the English 101/102 instructor uses multiple assessment measures rather than a single

measure in class and the other Learning Elements. There were no medium, positive correlations observed between Learning Element 9f and other variables. I noted a small, positive correlation between Learning Element 9f and 1 other variable. See Table 41 for specific correlation values and *p* values.

Table 41

Significant Correlations – Learning Element 9f: The English 101/102 instructor uses multiple assessment measures rather than a single measure in class

Learning Element #	Variable	R	*p*
9g	The class instructor uses multiple assessment measures rather than a single measure on Facebook/ Twitter	.294	.039

Note. N = 50. Class or classroom = English 101/102 class

Summary

In this I chapter provided a depiction of the study results through a description of parametric statistics in order to answer the research question. Results supported the hypothesis that there was a statistically significant relationship across students' perceptions of the nine elements of authentic learning when using social media as an instructional tool. Key findings were that students reported significant correlations related to collaboration, reflection, and articulation (elements 5, 6, and 7) as part of their social media experiences in English 101/102. In Chapter 5, I will explain the results of the study. First, I will provide a description of data collection. The discussion includes information regarding recruitment and response rates, as well as a discussion of the demographic characteristics of the sample. Following this overview, I will provide a discussion of the statistical analysis and my findings. I will discuss these findings in light of the theoretical framework, interpretations of the findings, and offer recommendations for action and further research in Chapter 5.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of my quantitative study was to determine the perceptions of undergraduate first-year freshmen composition students across nine elements of authentic learning using social media as instructional tools. In the literature I reviewed, researchers suggested that the increase in the accessibility of technology could help students to improve their authentic learning if used as instructional tools (Cooke, 2017; Sandlin & Peña, 2014; Tur et al., 2017; and Zielinski, 2017). Results supported the hypothesis as there was a statistically significant relationship across students' perceptions of the nine elements of authentic learning when using social media as an instructional tool. Key findings were that students reported significant correlations related to collaboration, reflection, and articulation (elements 5, 6, and 7) as part of their social media experiences in English 101/102. In this chapter, I will discuss the interpretation of these findings, as well as the limitations and implications.

Interpretation of the Findings

In this study I examined first-year composition student perceptions of authentic learning related to their use of Facebook and/or Twitter as an instructional tool. The two theories that guided my research study were Bandura's (1977) social cognitive theory and Siemens' (2005) theory of connectivism. The results of this study both confirm and extend what is understood related to students' perceptions of their authentic learning and collaboration using social media. Elements 1, 2, 3, 4, 5, 6, 7, and 8 all confirmed and broadened what I discovered through research in the literature.

For Authentic Learning Element 1, related to providing authentic context, the results of this study confirm and extend previous research studies. Similar to the study done with graduate education students (Bozalek & Watters, 2014), this study confirms the importance of authentic learning when authentic context is provided but extends it to undergraduate students. Students in this study perceived that they were able to transfer skill or knowledge from their social media use in the course, in an authentic manner. Previous studies have shown that undergraduate faculty when trained in using authentic methods, see value in providing authentic context to their content area (Zielinski, 2017). This study extends the understanding of authentic learning experiences to include student perceptions, specifically, their view that social media can be a tool that supports authentic learning experiences. While students using social media in college courses have said they felt more connected and motivated (Cooke, 2017), results from my study extend this specifically to the authentic learning context.

For Authentic Learning Element 2, related to providing authentic activities, the results of this study confirm and extend previous research studies. The strongest correlations indicated that students in this study perceived that they were able to participate in the activities and observe the strategies relevant to other disciplines and broader knowledge access through Facebook/Twitter and students perceived that their ability to determine relevant information from a variety of inputs, using Facebook/Twitter was strong. Previous studies have shown that undergraduate students, when using social media as an authentic learning tool, see value in using social media and online social networking in the classroom setting (Sandlin & Peña, 2014). This study extends the understanding of authentic learning experiences to include student perceptions,

specifically, their view that social media can be a tool that supports authentic activities. Students feel they can gather relevant information from these social media influences, and there are studies that support this information (El Rayess et al., 2018). While students using social media in college courses have said they felt more connected and motivated (Belangee et al., 2015), results from my study extend this specifically to providing authentic activities.

For Authentic Learning Element 3 related to providing access to expert performances and the modeling of processes, the results of this study confirm and extend previous research studies. The strongest correlations indicated that students in this study perceived there were activities and strategies relevant to other disciplines and broader knowledge access through Facebook/Twitter and students' Facebook/Twitter pages allow access to other learners at various stages of expertise. Previous studies have shown that undergraduate students, when using online social networks as an instructional tool, see value in providing access to expert performances and the modeling of processes (Casassa et al., 2018; Cydis, 2015; Dalsgaard, 2016; Friess & Lam, 2018). This study extends the understanding of authentic learning experiences to include student perceptions, specifically, their view that social media can be a tool that supports authentic learning experiences. Although students using social media in college courses have said they felt more connected (Cydis, 2015), results from my study extend this specifically to the online community and expert knowledge and understanding it enhances. Likewise, my results confirm that equally students who are more well-informed and instructors can improve learning for others via sharing their diverse stages of proficiency. Because traditional instructors lecture to share content, traditional classrooms are not as sufficient

for sharing expertise and modelling content for real-life learning according to student perceptions.

For Authentic Learning Element 4, related to providing multiple roles and perspectives, the results of this study confirm and extend previous research studies. The strongest correlations indicated that students in this study perceived they were capable of investigating matters from dissimilar opinions and students were competent enough to utilize the learning sources and resources for various resolutions. Previous studies have shown that undergraduate students, when using online social networks as an instructional tool, see value in providing multiple roles and perspectives (Cydis, 2015; Dalsgaard, 2016; Friess & Lam, 2018). This study extends the understanding of authentic learning experiences to include student perceptions, specifically, their view of how social media can be used to expand student views and perspectives outside of the classroom. Even though students using social media in college courses have said they felt more connected (Friess & Lam, 2018), results from my study extend this specifically in formal, yet authentic learning situations including using multiple roles and perspectives.

In the same way, my results confirm that students ought to be permitted to observe complications from more than one point of view to warrant proficiency in areas. This means that it is not sufficient to provide one expert view or a single perspective in the curriculum as they should engage in debates and discussions. Complex and competing perspectives are needed for students to develop sufficient cognitive abilities to master complexity and for preparation to transfer their knowledge to the real world (Arteaga Sánchez et al., 2014). According to the students' perceptions in my study,

engaging with the same material at different times and for different purposes is also helpful for dealing with complexity.

For Authentic Learning Element 5 related to supporting collaborative construction of knowledge, the results of this study confirm and extend previous research studies. Students in this study perceived they were able to collaborate both in the traditional classroom setting and through social media. Previous studies have shown that students, when using online social networks as an instructional tool, see value in supporting collaborative construction of knowledge (Journell et al., 2014). Even though students using social media in college courses have said they felt more connected to one another and the content (Parker et al., 2013), results from my study extend this specifically when supporting collaborative construction of knowledge are required as part of course content. Correspondingly, my results confirm that when we offer students a mutual task and evaluate that task collaboratively, they perceive more authentic learning. It is not enough to get students to work in groups, but rather they should be engaged in a genuine problem-solving task which take place together.

For Authentic Learning Element 6 related to promoting reflection, the results of this study confirm and extend previous research studies. Students in this study perceived they were required to make decisions about how to complete tasks, with some thought and reflective writing through Facebook/ Twitter and were able to move freely in the environment and return to any page upon reflection. Previous studies have shown that students, when using online social networks as a reflective tool, see value in supporting collaborative construction of knowledge (Manuel & Schunke, 2016). Even though students using social media in college courses have said they felt more connected

(Wohleb et al., 2018), results from my study extend this specifically when promoting reflection. According to Hughes et al. (2014) "reflection," a crucial component of authentic learning, "is seen in authentic learning as social and interdependent, working in collaborative groups rather than an individual process" (p. 77). In this way, students can associate their concepts to more well-informed other students and instructors, associating and mixing new information into their conceptual frameworks. This aligns with both the theories I have used in my study and the literature review I have done, because of students' abilities to connect with one another through social media and construct their own authentic online learning environments.

Authentic Learning Element 7 related to promoting articulation. The results of this study confirm and extend previous research studies. The strongest correlations indicated that students in this study perceived that they were able to work in collaborative groups that enabled discussion and social reflection on Facebook/ Twitter and students completed tasks in English 101/102 that enabled discussion and defense of arguments. Previous studies have shown that students, when using online social networks related to promoting articulation, see value in supporting collaborative construction of knowledge (Cydis, 2015; Dalsgaard, 2016; Friess & Lam, 2018; Hughes et al., 2014). Even though students using social media in college courses have said they felt more connected (Kim et al., 2015), results from my study extend this specifically when promoting articulation are provided. In the same way, my results confirm that prospects should be offered for students to write and speak about their mounting grasp within groups of professional practice. Intellectual development first occurs socially between people before being internalized within the individual (Quigley, 2014).

Authentic Learning Element 8 related to providing coaching and scaffolding. The results of this study confirm and extend previous research studies. The strongest correlations indicated that students in this study perceived that there were more knowledgeable students able to assist with tutoring in the English 101/102 classroom and the English 101/102 instructor is available to provide contextualized support in the classroom and online. Previous studies have shown that students, when using online social networks as an instructional tool, see value in providing coaching and scaffolding (Kuznekoff et al., 2015). Even though students using social media in college courses have felt the need for authentic learning when authentic coaching and scaffolding are provided (Lane, 2017), results from my study extend this specifically when authentic multiple roles and perspectives are provided. Similarly, my results confirm that rather than transmitting information, the instructor's role is a supportive one. More mature or knowledgeable students can play a similar role (McMeans, 2015). This indicates guidance and support from instructors and fellow students is equally acceptable and positively received, according to student perceptions.

The results from Authentic Learning Element 9 data related to providing authentic assessment of learning within tasks, is the only element that contradicts my study and previous research studies. Students in this study perceived they were assessed on the result of the learning process while in English 101/102. Previous studies have shown that students, when using online social networks as an assessment tool, see value in online social networking as an authentic tool to use for educational purposes, (Jacquemin et al., 2014). Despite the contradictory results from my study, students appreciate the tools

available through online social networks and in fact found it to be more accessible than traditional university online elements, for example Blackboard.

Limitations of the Study

There were limitations that had an impact on my study in that the findings were specific to college and educational settings and may not hold true for all universities in the country. However, it is important to note that, in spite of the limitations, the findings will be useful for improving authentic learning and instruction at similar universities and other settings of similar size and demographics, and for providing improvement opportunities and further research prospects on the topic. One limitation of this study is the failure to deduce any type of cause-and-effect association between the variables of significance. The design of the study only allowed a mathematical outcome of the trends and relationships amid the variables of significance. The research design as an online survey may also have been a limitation of the study. As instructors dispersed the survey link throughout online avenues, it was restricted to the inclination of participants to take the opportunity to follow the online link and respond to the survey. Even though online links are now a familiar means for individuals to reach out to one another, there is scarcely any enticement for the participants to respond if they are not interested in the outcomes of the research at all.

Another limitation is related to the sample selected for this study. I used first-year university English composition classes. The results may not apply to students further along in their studies, or those taking different courses. Another limitation related to the sample is that it was not completely random. The sample consisted of only undergraduate composition students who volunteered to complete the survey. It is very possible that

those who volunteered to participate were somehow different from those who did not participate (see Frankfort-Nachmias & Nachmias, 2015). For example, those students who contributed may have had fewer responsibilities that allowed them the extra time needed to complete the surveys. In addition, participants in this study were not asked to describe how they used social media or online social networking; it is possible instructors used social media for announcements or an LMS. That is another limitation.

Another important point related to the limitations of this study relates to the statistical analysis technique used. Pearson product correlation seeks to measure the linear correlation between two variables. Since the characteristics and factors will be self-reported on a Likert-type scale, participants may not have the same internal definitions of scale ratings. It was assumed that participants would answer all questions honestly. In addition, it is possible that not all participants were native English speakers, which could have impacted how some participants responded to the questionnaires. While the survey design did result in a major limitation, I gave careful consideration to the selection of valid and reliable instruments. Such self-reporting can lead to different interpretations of the characteristics which limits the ability to generalize my findings.

Recommendations

This study has contributed to the overall literature on authentic learning and has explored whether social media should view differently as an instructional tool. I based recommendations for further research on study results and limitations of the study. The first recommendation is related to the finding that students perceived their authentic learning more positively when using social media as an instructional tool, primarily for collaboration, reflection, and articulation with one another and their instructor (see

learning elements 5, 6, and 7). Therefore, researchers and scholars should consider more research about the uses of social media like Twitter and Facebook used as authentic instructional tools and the deeper understanding of students' authentic learning.

The second recommendation is related to the study finding of authentic learning and students' use of social media, related to collaboration. The results from this study may indicate that authentic learning is a useful strategy to use when trying to develop students' collaboration skills in college level courses. However, researchers and scholars should consider more research into the relationship between social media use, authentic learning, and building collaboration skills. Future research could involve more in-depth observations using qualitative components to better understand the complex interactions among students as they participate in course-related activities using social media. Research may include conducting interviews regarding students' use of social media like Facebook, Twitter, and other popular platforms when it used as a collaboration tool among classes of all ages and contents and its far-reaching affects those students' learning and lives. The effect of online social networks may not be simply relegated between the direct interactions of the people conducting that collaboration, but may in fact be distributed beyond the realm of the classroom. That could enhance student collaboration. More research should also be conducted on the use of collaboration to maintain student engagement. It is common for students to engage with interactive, collaborative online social networking like Twitter, Facebook, blogs, and educational software in some settings, but more research should be done regarding the use of the platforms to engage students in an academic setting to understand why it is not utilized in more settings.

The third recommendation is related to the study finding of authentic learning and students' use of social media, related to reflection. The results from this study may indicate that authentic learning is a useful strategy to use when trying to develop students' reflection skills in writing and composition. However, researchers and scholars should consider more research into the relationship between social media use, authentic learning, and reflection skills. Future research could involve more in-depth observations using qualitative elements to better understand the involved inner workings of students' minds as they reflect on course-related activities using social media. Research should include conducting interviews regarding students' use of social media like Facebook, Twitter, and other popular platforms when it used as a reflection tool. Researchers should expand this study by interviewing participants about their reflective process using SNS with complex texts or content among different age groups, grade levels, and subjects, and how reflecting influenced how they saw themselves as learners.

The fourth recommendation is related to the study finding of authentic learning and students' use of social media, related to articulation. The results from this study may indicate that authentic learning is a useful strategy to use when trying to develop students' articulation skill in college level courses. However, more research needs to be done into the relationship between social media use, authentic learning, and building articulation skills. More research regarding the element of articulation of students, especially through online social networking. Future research could offer more of an understanding in how Twitter users share information, especially from the student prospective as they retweet content to their friends. Future studies might be expanded by interviewing participants about their perceptions of the use of Twitter in their active

engagement with complex texts and how it influenced how they articulate one another or express their ideas. Further research could scrutinize what other SNS could be utilized to inspire participant interaction with content.

The last recommendation is related to the limitations of this study. I conducted this study with 50 undergraduate composition students at an urban south eastern university in the United States. Therefore, researchers and scholars could replicate this study in a university in the Midwest or Northern region of the United States or in a university outside of the United States to determine if results are similar. In addition, researchers should continue to look at authentic learning experiences and social media through student perceptions of instructional tools and the use of social media. Potential research should reflect on other features of authentic learning. This could be completed by recognizing other teaching habits found in student learner pedagogy or by concentrating exclusively on one authentic element for a more comprehensive account of effectiveness. One more path to discovering effective student-centered approaches is by means of open-ended interviews that do not emphasize any connectivism or online social media. Innovative instruction can be recognized, or anticipated behaviors can be further distinguished.

Implications

This study will contribute to positive social change in several ways. First, at the individual level, the information from this study benefits instructors and undergraduate composition students simultaneously by providing information about authentic learning experiences when specific online social networking sites are used as instructional tools, while also providing insights into student perceptions of those learning experiences.

Faculty may better understand how to best utilize social media as an authentic instructional tool and how to better assess their students according to their students' authentic learning needs. Students may better understand how social media may be applied authentically as an instructional tool on a daily basis for collaboration, reflection, and assessing the validity of online sources. There is also potential for change at the organizational level, which in this case might be the university English department. Data from this study could inform universities, colleges, and school districts about the needs of instructors and students and provide insight to make changes to curriculum plans based on detailed research and social media trends, based on the needs of each individual setting. This study also advances knowledge in the field of Learning, Instruction, and Innovation because of its inclusion of online social media as an instructional tool and tool of pedagogy and innovation. The results of this study may be used by administrators, professional development personnel, instructors, researchers, and policymakers to determine ways to improve adoption of social networking sites and promote authentic learning. In addition, this study may contribute to current knowledge about adoption of social networking sites and contribute to the existing literature in this field.

Another contribution that this study may make to positive social change is to provide information to be used to improve professional practice by informing training available to university instructors concerning social media use. In spite of the substantial part that social media plays in college students' ordinary lives, there was a limited amount research on how the instructors used or included social media in students' instructive experiences, chiefly when used in authentic learning environments within the

composition classroom. Such research on social media in the composition classroom is vital since students desire a technically enriched educational encounter.

The last contribution and implication of this study is that it may provide educational stakeholders with a deeper understanding of data, information, and answers to questions that will expand the literature regarding both authentic learning and student perceptions of social networking sites. After the completion of my study, educational stakeholders can now use the results of this study to plan curriculum that includes online social media as an instructional tool, knowing that students perceive that tool as a positive addition to their classroom. The findings from this study may assist administrators and teaching faculty at universities in determining student perceptions of social networking sites as instructional tools in order to reduce, minimize, or overcome perceived barriers to teaching and learning environments that include digital supports.

Conclusion

The problem addressed in this study was that it is not known how English composition students' perceptions of authentic learning were impacted using online social media as instructional tools. The purpose of the study was to determine the perceptions of undergraduate first year freshmen composition students across nine elements of authentic learning using social media as instructional tools. To fulfill this purpose, I used quantitative methodology to explore the data collected from 50 student participants and analyzed using a Pearson product correlation. The key findings of this quantitative study were that students perceived that social media provided them opportunities to collaborate, reflect, and articulate authentically when using social media as an instructional tool. Colleges and universities may be able to use data from this study

to help faculty better understand student perceptions of social media use in introductory English courses. Faculty might use results from this study to design course content using social media to provide authentic learning experiences. This research may lay the groundwork for improving scaffolding of student collaboration online, personal learning environments, real-world content, and the opportunity for learning beyond the classroom. The implications for instructors are just as important, adding to the possibility of professional development and policy inclusion and updating to better meet the needs of future generations of learners. The results from this study may contribute to social change by providing insight into whether or not universities should support faculty who want use social media as an authentic learning strategy with college students.

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Appendix: Permission from Developer to Use Perceptions of Authentic Learning Survey Instrument

Dear Stacy,
Yes please feel free to use and/or adapt the instrument as you wish to suit your research study. Kindly acknowledge the original source in your dissertation.
May I wish you all the best for your study.
Best wishes
Jan
Emeritus Professor, Murdoch University