EDITOR'S NOTES

The spring 2020 issue of the *Journal for the Liberal Arts and Sciences* features researchers from a number of academic institutions—Murray State University, University of Memphis, Arkansas State University, University of Tennessee Martin, Oakland City University, Mississippi State University at Meridian, Hopkins County Schools, Kentucky, Xing Wei College, Shanghai, and Berea College. The first work in this edition focuses upon the dynamics of two Web conferencing approaches for teaching graduate teachers about literacy programs. The author notes, for example, that "Web conferencing as an online instructional tool is becoming widely used in many literacy programs in graduate education." However, it is pointed out how difficult it is "to find a systematic empirical study of how the collaborative competencies of graduate students and course instructors impact literacy learning in any online environment." To address this void of knowledge, the study attempted "to determine the impact of a graduate reading methods course offered via synchronous web conference tools in combination with an asynchronous component that supports graduate literacy candidates who were working as literacy coaches and reading specialists." Following this examination, a group of researchers examine the effectiveness of the use of an edTPA portfolio approach developing effective teachers "and its ability to predict the success of these teachers during their first year in the classroom."

The next two pieces of research in the spring issue of the *JLAS* are concerned with school safety. The first one in this group, and the third in the issue, examines the dynamics of building a strong relationship between school leadership and resources officers, an essential task in today's violent culture. Article four involves a historical investigation in the origins of Mississippi public school transportation through the viewpoint of safety, using a tragic historical school bus incident as its reference point.

Another article in this issue ponders the failure of collegiate sports in higher education, the story of collegiate athletics over the last half century being "one of lost opportunity." The concept of signaling and how it might be better used to help keep more students out of math remedial classes in community colleges is the topic of our next contribution. The study "uses the concept of signaling to examine how students interpret signals from sources such as counselors, teachers, peers, and policies." The final research piece for this spring issue looks at "an academic structural hallmark," that of the sabbatical and one professor's reflections "on her sabbatical experience of becoming an undergraduate student again in a college course."

Overall, this issue presents a wide-ranging group of research articles that speak to both the academic and to those interested in being kept up to speed with some of the latest issues in education.

Randy Mills, Editor
Journal for the Liberal Arts and Sciences

The Impact of Asynchronous and Synchronous Collaboration Tools for Preparing Reading Specialists

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Abstract

Web conferencing as an online instructional tool is becoming widely used in many literacy programs in graduate education. However, little is known about how faculty combine asynchronous and synchronous web conferencing technology to enhance pedagogical content knowledge. Thus, the purpose of this study was to determine the impact of a graduate reading methods course offered via synchronous web conference tools combined with an asynchronous component that supports graduate literacy candidates working as literacy coaches and reading specialists. The data indicated a paradigm shift in the way online courses should be taught via two types of online instruction (asynchronous text-based materials and synchronous web conferencing lectures) to emulate traditional face-to-face lectures. Results suggested 93% of graduate students would prefer to take an online course that uses both synchronous web conferencing lectures and asynchronous text-based instruction. Eighty-seven percent of graduate students felt that participating in synchronous web conferencing lectures in addition to using the asynchronous text-based lecture materials increased their understanding of the course material.

Introduction

For more than a decade, distance learning has been a part of higher education in every post-secondary institution. Administrators who thought that an instructor's physical presence in a classroom contributed to the success of the students and the program pedagogically and economically are now encouraging their academic faculty members to teach via video conferencing—a viable alternative (Peterson & Slotta, 2009). To expand offerings, bolster enrollment and revenue streams, and reach remote students, many administrators are willing to offer web-enhanced courses because they think technology-based classrooms can produce better results than the conventional classroom. Such views are supported by many researchers who suggest distance teaching and learning can be equal to or better than

in-person teaching in a traditional classroom (Karabulut & Correia, 2008). A web-enhanced course is classified as an online class wherein face-to-face instruction is integrated, with a substantial amount of "seat time" in the traditional classroom being substituted with internet-based activities. Ultimately, the goal of hybrid instruction is the creation of synchronous and asynchronous learning communities that enable students to create networks of interactions in which deep learning takes place (Li & Atkins, 2005; Wang & Newlin, 2000).

Web conferencing as an online instructional tool is becoming widely used in many literacy programs in graduate education. However, it is difficult to find a systematic empirical study of how the collaborative competencies of graduate students and course instructors impact literacy learning in any online environment (Bodzin & Park, 2016). The purpose of this study was to determine the impact of a graduate reading methods course offered via synchronous web conference tools in combination with an asynchronous component that supports graduate literacy candidates who were working as literacy coaches and reading specialists.

Background

Many higher education institutions have sought to expand online graduate programs and courses, identifying such measures as critical to the institution's financial stability and growth. Expanding course and program offerings to include online formats is described as an asset with a relatively lower cost and limited impact on the physical campus. As a result, many universities have made greater efforts to provide faculty with substantive professional development for online teaching and learning over the past two decades. Central to this professional development is the principle that Palloff and Pratt (1999) described as follows:

> Electronic pedagogy is not just about fancy software packages or simple course conversion. It is about developing the skills involved with community building among a group of learners so as to maximize the benefits and potential that this medium holds in the educational area. (p. 159)

For faculty, online and web-enhanced courses pose particular challenges because class sessions take place in a traditional classroom, but technology is used to facilitate activities, deliver content, and/or assess students. The multimodal synchronous online environments often rely on active participation, the demonstration of teaching practices, field-based experiences, and, in many cases, smaller class sizes. Therefore, teaching online for faculty consumes even more time and energy than teaching in the classroom, and students' participation will falter if the instructor is not perceived by students as being right there online with them, leading by example through his or her commitment of time and energy (Fuest, 2007; Keir & Elizondo, 2010).

Although hardworking and serious about their studies, graduate students in a distant location are not connected meaningfully with their peers and instructors (Kanuka, Collett, & Caswell, 2002). Danielson (1996) advocated that learning communities must be created in an online environment in which all students become engaged through discussions, which can occur through synchronous chats or asynchronous-threaded discussions (Hiltz & Turoff, 2005). Gambrell and Almasi (1996) concluded that through discussion, students are "active learners who engage in the construction of knowledge…rather than simply learn the meanings that others have created" (p. 27). Schwartzman (2006) noted that the explicit teamwork in online threaded discussions also increases pedagogical knowledge among students. Evidence suggests that more interactive course environments improve students' professional knowledge and increase satisfaction with the course (Li & Akins, 2005). However, many online instructors and students prefer asynchronous-threaded or multiple-threaded discussions that allow them to respond at their convenience (Vonderwell & Zachariah, 2005).

Within the synchronous virtual environment, social interaction and connectivity engages students as they interact with each other during group projects. As Li and Akins (2005) pointed out, "Interaction may be fundamental in many learning processes and even more so in online environments. Online educators need to strive to increase and engage interaction" (p. 53). Durrington, Berryhill, and Swafford (2006) noted that the "research in both online contexts suggests that student interactivity contributes to positive student learning experiences and is a key to effective instruction" (p. 190). In web-enhanced classes, students become supportive participants with their peers as instructors nurture the

growth of the learning communities so that "the collaborative effort among the learners helps them achieve a deeper level of knowledge generations" (Pallof & Pratt, 1999, p. 110).

The online environment, with the addition of synchronous tools such as Zoom®, provides a high level of motivation to graduate students (Coffey, 2010). Graduate students access Zoom software from a server and join the synchronous interactive environment from a desktop or laptop computer without having to go to a meeting place. Examples of Zoom synchronous online formats include chat rooms, audio/video conferencing, and two-way live broadcast lectures. Because it is a live online class, graduate students have a high level of involvement with the content that is presented in the class through their discussions and questions (Skylar, 2009). In the online learning environment, synchronous web conferencing tools allow the instructor to present slides and websites, share files and applications, and poll and query students on topics related to research. Instructors also can assign students to online breakout rooms and encourage them to have small-group discussions while logged into the virtual room (Shi & Morrow, 2006).

Synchronous systems used in conjunction with asynchronous tools can create an online learning community that provides support to students from both peers and instructors because the web-enhanced classes enhance the interaction and create a sense of connectedness among students (Beattie, Spooner, Jordan, Algozzine, & Spooner, 2017). Web conferencing via the Zoom product has been shown to be effective not only in delivering course content but also in creating an ongoing communication network among graduate students and instructors and in providing other types of instructional and professional support. For example, web conferencing via Zoom can serve as a collaborative tool to allow students from widely disbursed communities to share common interests and concerns and engage in joint problem-solving in real-life classroom situations. When used in university coursework and other professional development activities, it can be comparable to having face-to-face discussions in a conventional class setting. With Zoom web conferencing, the course instructor can arrange learners into any size group and have them work together on assigned tasks, projects, brainstorming activities, and application exercises (Beattie et al., 2017).

The asynchronous format of web conferences via Canvas®, a learning management system software, allows graduate students to become creative and innovative because they have more time to prepare a response to a set of directions or questions. For example, Wade, Niederhauser, Cannon, and Long (2001) stated that in a traditional face-to-face class, an instructor's queries are often not fully responded to because graduate students do not have sufficient time to research or to think critically. As a result, their answers are often spur-of-the-moment, shallow, and incomplete. By contrast, in a web conference, graduate students develop the ability to (a) use technology effectively and productively; (b) conduct research and use information; (c) think critically, solve problems, and make decisions; and (d) be ethical digital citizens (Harasim, 1990). Since web discussions can go on for days or longer, graduate students also have the opportunity to comment on classmates' responses, ask for clarification of ideas, or consider differing viewpoints. Instructors can more easily accommodate the group's needs and provide clarification as needed, while instructors in traditional courses often have to divide their time among several groups and delay feedback until the end of an activity. Thus, it is not surprising that graduate students feel web-enhanced courses allow them to apply a deeper understanding of concepts on issues and ideas in which they are actively engaged in knowledge construction processes (Bodzin & Park, 2016).

Despite the growth in the use of synchronous tools to facilitate online instruction, little is known about how faculty combine asynchronous and synchronous web conferencing technology to enhance pedagogical content knowledge (Skylar, 2009). The role of interactivity in asynchronous and synchronous environments is important, particularly as it relates to its effect on student learning and satisfaction (Stephens & Mottet, 2008). Research suggests that interaction in both asynchronous and synchronous environments should result in increased learning. However, these arguments are more theoretically supported rather than empirically supported (Allen, Mabry, Bourhis, Tittsworth, & Burrell, 2004). Thus, this study examined the impact of a collaborative asynchronous/synchronous graduate reading methods course designed to support graduate literacy candidates working as literacy coaches and reading specialists.

Graduate Reading Methods Course and Instructional Activities
The purpose of a reading methods course is to allow graduate students to explore a topic related to in-depth literacy development and to provide leadership in literacy in the teachers' schools and districts (Quatroche, Bean, &

Hamilton, 2001; Swartz, 2005). The graduate reading methods course included in this study was offered by a midwestern university's Department of Early Childhood and Elementary Education program. The course was designed to further develop the graduate students' pedagogical content knowledge, coaching skills, and professional dispositions in the following domains: data-based decision-making and evidence-based practice. The objectives were to help graduate students pursue individual professional knowledge and behaviors through professional activities and leadership and to use literature and research about professional development and school culture to build effective professional development programs in their school or district. The aims were to encourage graduate students to reflect on teaching and learning in the schools and districts in which they teach, determine needs, and decide on a leadership project to improve teaching and learning. The graduate students were also encouraged to reflect on the effectiveness of their leadership project through the project evaluation.

The course was offered as a web-enhanced course for three credit hours. It was separated into two categories—asynchronous and synchronous—so graduate students experienced both conditions: synchronous interactive web conferencing lectures and asynchronous text-based lectures. Instructors used online tools to create a web-enhanced course in which one-third of the sessions were offered through Canvas asynchronous online learning (text-based, using discussion boards), and two-thirds of the sessions were offered with the newer web synchronous conferencing tool Zoom.

A typical class week included the graduate students downloading text-based lecture notes (e.g., PowerPoint, Google document, Word), reading a chapter in the textbook to correspond with the lecture notes, and responding on a discussion board at the end of the week. All course contents were available for graduate students in an asynchronous format and organized by Canvas module tools. Web conferencing lectures were structured to mirror a face-to-face classroom. The interactive nature of the Zoom instructional tools provided a real-time virtual classroom using two-way audio, a webcam, breakout rooms, a chat window, and application sharing.

Methods

The approach of this study was quantitative in nature. The purpose of quantitative research is to observe phenomena or occurrences affecting

populations. Quantitative research is used to learn about data that are observed or measured to examine questions about the sample population. Quantitative research allows answers to questions about the frequency of a phenomenon or the magnitude to which the phenomenon affects the sample population (Creswell, 2013).

The study included 15 graduate students who were enrolled in the course during the fall of 2018. The ages of the graduate students ranged from 25 to 40 years old. All were White female classroom teachers. Of the 15 teachers, 75% had taught for three years or less, and 25% had over five years of teaching experience.

The instructor/researcher used a survey methodology to assess important impacts of using asynchronous and synchronous tools as the primary course delivery format. A survey was administered to all graduate students enrolled in the online course as a voluntary evaluation procedure at the end of the course. The survey consisted of questions on a Likert scale of 1-5, with 1 equaling *strongly disagree* and 5 equaling *strongly agree*. Several questions asked graduate students about their preferences regarding asynchronous and synchronous methods. The graduate students responded anonymously to the survey questions and were informed that their responses would not affect their course grade. The survey responses were gathered electronically, and the results were calculated by a research assistant who was not an instructor in the course. The purpose of the survey was to learn what motivated survey respondents and what was important to them, as well as to gather meaningful opinions, comments, and feedback. The feedback was the baseline to measure and establish a benchmark from which to compare results over time. The survey provided a snapshot of attitudes and behaviors—including thoughts, opinions, and comments—about the target survey population (Dillman, Smyth, & Christian, 2014).

Data for this study were collected throughout the fall 2018 academic term. The data included a leadership project report, graduate student exit reflections on their teaching and learning, cooperating teachers' evaluations, group discussions that took place on Canvas, and a course survey. Assignments were evaluated based on whether a student presented ideas that reflected integration of course material and critical thinking skills. Grades were assigned according to expectations for a particular assignment relative to the material

covered in the class. Each piece of data was graded using a 100-point evaluation rubric (see Table 1). The cooperating teachers were asked to respond to a field experience evaluation form to assess the impact of the class and the progress and needs of the graduate students. Their comments and feedback data were used to assess the academic and professional expertise of the graduate students, and their input provided guidance and implications for ways to improve literacy coaching.

Table 1

Essential Benchmark Evaluation Rubric

ILA Standards for the Preparation of Literacy Professionals 2017	Outstanding	Satisfactory	Unsatisfactory
ILA 1.1, 1.2, 1.3, 1.4; 2.1, 2.2, 2.3, 2.4; 3.1, 3.2, 3.3, 3.4; 4.1, 4.2, 4.3, 4.4; 5.1, 5.2, 5.3, 5.4; 6.1, 6.2, 6.3, 6.4; 7.1, 7.2, 7.3, 7.4	Candidate exhibits a defined and clear understanding of the assignment. Evaluation of coaching provides impressive and detailed evidence of candidate's understanding of importance of students' interests, reading abilities, and backgrounds in planning reading programs and in selecting materials for reading instruction, as well as the ability to effectively model, coach, and support classroom teachers.	Candidate establishes a good comprehension of the assignment. Evaluation of coaching provides some evidence of candidate's understanding of importance of students' interests, reading abilities, and backgrounds in planning reading programs, and in selecting materials for reading instruction, as well as the ability to model, coach, and support classroom teachers.	Candidate lacks basic understanding of the assignment. Evaluation of coaching demonstrates candidate's lack of understanding of importance of students' interests, reading abilities, and backgrounds in planning reading programs, and in selecting materials for reading instruction, as well as the inability to model, coach, and support classroom teachers.
ILA 6.1, 6.2, 6.3, 6.4	Reflective narrative addresses how standard is met reveals candidate's in-depth understanding of the standard and the importance of students' interests, reading abilities, and backgrounds in planning reading programs and in selecting materials for reading instruction, as well as the importance of being able to effectively model, coach, and support classroom teachers.	Reflective narrative addresses how standard is met reveals candidate's general understanding of the standard and the importance of students' interests, reading abilities, and backgrounds in planning reading programs and in selecting materials for reading instruction, as well as the importance of being able to effectively model, coach, and support classroom teachers.	Reflective narrative addresses how standard is met reveals candidate's lack of understanding of the standard and the importance of students' interests, reading abilities, and backgrounds in planning reading programs and in selecting materials for reading instruction, as well as the importance of being able to effectively model, coach, and support classroom teachers.

ILA Standards for the Preparation of Literacy Professionals 2017	Outstanding	Satisfactory	Unsatisfactory
ILA 4.1, 4.2, 4.3, 4.4; 5.1, 5.2, 5.3, 5.4	Reflective narrative reveals candidate's in-depth understanding of the standard and the importance of using various books and non-print materials appropriate for a diverse group of learners in reading programs, as well as the importance of being able to effectively model, coach, and support classroom teachers and paraprofessionals in using students' interests and background experiences to select appropriate materials.	Reflective narrative reveals candidate's general understanding of the standard and the importance of using various books and non-print materials appropriate for a diverse group of learners in reading programs, as well as the importance of being able to effectively model, coach, and support classroom teachers and paraprofessionals in using students' interests and background experiences to select appropriate materials.	Reflective narrative reveals candidate's lack of understanding of the standard and the importance of using various books and non-print materials appropriate for a diverse group of learners in reading programs, as well as the importance of being able to effectively model, coach, and support classroom teachers and paraprofessionals in using students' interests and background experiences to select appropriate materials.
ILA 6.1, 6.2, 6.3, 6.4; 7.1, 7.2, 7.3, 7.4	Candidate exhibits a defined and clear understanding of the assignment. Evaluation of coaching provides impressive and detailed evidence of candidate's ability to effectively model, coach, and support classroom teachers in various ways of modeling reading and writing as valued lifelong activities to their students in classroom.	Candidate exhibits a general understanding of the assignment. Evaluation of coaching provides some evidence of candidate's ability to model, coach, and support classroom teachers in various ways of modeling reading and writing as valued lifelong activities to their students in classroom.	Candidate lacks basic understanding of the assignment. Evaluation of coaching demonstrates candidate's inability to effectively model, coach, and support classroom teachers in various ways of modeling reading and writing as valued lifelong activities to their students in classrooms.
ILA 6.1, 6.2, 6.3, 6.4; 7.1, 7.2, 7.3, 7.4	Reflective narrative addressing how standard is met reveals candidate's in-depth understanding of the standard and the importance of effectively modeling, coaching, and supporting classroom teachers in various ways of modeling reading and writing as valued lifelong activities to their students in classroom.	Reflective narrative addressing how standard is met reveals candidate's general understanding of the standard and the importance of effectively modeling, coaching, and supporting classroom teachers in various ways of modeling reading and writing as valued lifelong activities to their students in classroom.	Reflective narrative addressing how standard is met reveals candidate's lack of understanding of the standard and the importance of effectively modeling, coaching, and supporting classroom teachers in various ways of modeling reading and writing as valued lifelong activities to their students in classroom.

ILA Standards for the Preparation of Literacy Professionals 2017	Outstanding	Satisfactory	Unsatisfactory
ILA 7.1, 7.2, 7.3, 7.4	Candidate exhibits a defined and clear understanding of the assignment. Modeling provides impressive and detailed evidence of candidate's commitment to the development of professional knowledge and dispositions and candidate's ability to effectively conduct study groups for paraprofessionals and teachers aimed at assisting them in implementing recommendations to improve adopted reading program to meet needs of all learners.	Candidate exhibits general understanding of the assignment. Modeling provides some evidence of candidate's commitment to the development of professional knowledge and dispositions and candidate's ability to effectively conduct study groups for paraprofessionals and teachers aimed at assisting them in implementing recommendations to improve adopted reading program to meet needs of all learners.	Candidate lacks basic understanding of the assignment. Modeling demonstrates evidence of candidate's lack of commitment to the development of professional knowledge and dispositions and candidate's inability to effectively conduct study groups for paraprofessionals and teachers aimed at assisting them in implementing recommendations to improve adopted reading program to meet needs of all learners.

Results and Discussion

The purpose of this research was to determine the impact of a graduate reading methods course offered via synchronous web conference tools combined with an asynchronous component that supports graduate literacy candidates who were working as literacy coaches and reading specialists. The collected data were analyzed, and findings are presented below according to graduate student feedback (based on data gathered via a course survey) and graduate student performance (based on data related to the leadership project, exit reflections, cooperating teachers' evaluations, and group discussion boards).

Graduate Student Feedback

Graduate student feedback was assessed via a course survey. For the survey, descriptive statistics were calculated for each survey item on a 5-point Likert scale, with 1 indicating *strongly disagree* and 5 indicating *strongly agree*. Fifteen out of 15 graduate students completed the survey. Results suggested 93% of graduate students would prefer to take an online course that uses both synchronous web conferencing lectures and asynchronous text-based instructions. Eighty-seven percent of graduate students felt that participating in synchronous web conferencing lectures in addition to using the asynchronous

text-based lecture materials increased their understanding of the course material. One graduate student wrote:

> Web-based conferencing encouraged me to develop a higher degree of ownership, enabling me to direct the discourse of the class, to establish ongoing relationships with instructors and peers, to make informative decisions together, and to take greater responsibility for the learning process. Canvas lectures showed me that I can still effectively learn materials outside of a traditional lecture.

Ninety-three percent of the students strongly agreed that the asynchronous format stimulated a productive weekly discussion and helped highlight the learning that took place. The same 93% also indicated that (a) synchronous web conferencing produced an effective learning dialogue among classmates, (b) the collaboration enabled them to meet course objectives, (c) the discussions facilitated their understanding of literacy coaching concepts and methods, and (d) the overall approach helped them apply the course material to their practicum positions.

The findings from this study indicate that web conferencing can be a useful tool for building a valuable professional and emotional support network among graduate students. Ninety-three percent of graduate students said they strongly agreed that they felt like part of a learning community in the course, and all of them indicated the online interactions had a friendly atmosphere. Almost 93% of graduate students reported feeling a greater level of connectedness with classmates during web discussions, while only 1% said they felt less connected to their classmates. As one graduate student noted:

> I felt comfortable with one another in asking and answering questions, giving personal examples, offering suggestions, expressing opinions and interacting in meaningful ways.Web conference allowed me to develop a continuing relationship with instructors and peers between class sessions, just as campus learners do.

These findings support other literature that has shown that the use of web conferencing in education positively correlates with course satisfaction (Beattie

et al., 2017) and is generally positively received by graduate students (Bodzin & Park, 2016). Moreover, the use of web conferencing to supplement traditional language education approaches has resulted in significantly higher positive marks (Bryer & Seigler, 2012) and improvement in the quality of the learning experience for graduate students in literacy (Offir, Lev, & Bezalel, 2008).
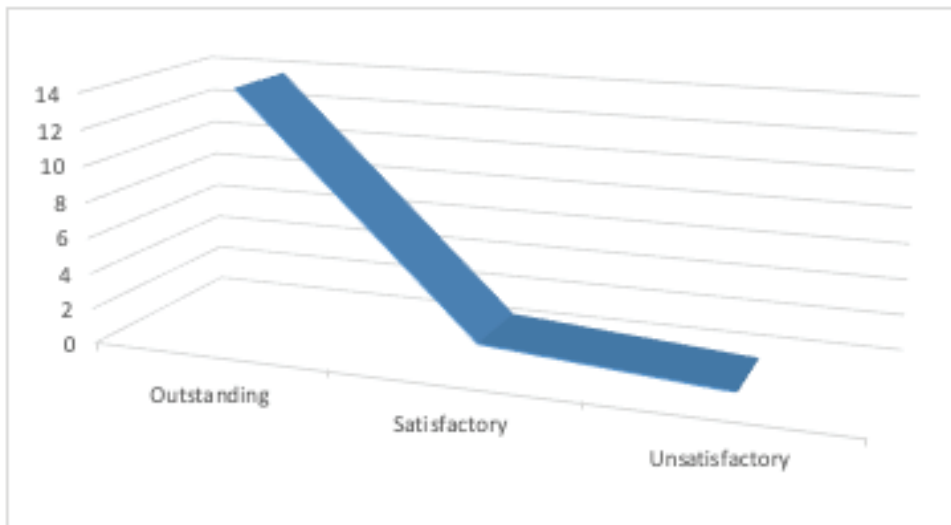
Graduate Student Performance

Graduate student performance was assessed via several aspects. For instance, graduate students' knowledge and educational concepts and theories were evaluated through exit reflections. Their ability to express their knowledge of educational concepts and theories within the conventions of academic discourse were assessed through the leadership project report and discussion boards. Integration of information from lectures, readings, discussions, and field experiences was also taken into consideration. Finally, the academic and professional expertise of the graduate students was assessed via cooperating teacher feedback.

The instructor/researcher articulated criteria such as outstanding, satisfactory, and unsatisfactory for work that corresponded to letter grades. The assignment of the letter grades was based on a graduate student's total score (a number between 0 and 100). The instructor/researcher explained and interpreted the evidence of the graduate students' performance through a feedback sheet and the evaluation rubric that were applied to all students. Grades were determined in accordance with the university's policy and written guidelines that were distributed among graduate students via Canvas. Overall, the results of the study showed that the performance data fell overwhelmingly in the outstanding or satisfactory column and had a mean score of 90.5 (see Figure 1). The data from the rubric revealed that 100% of the graduate students carried out coaching roles through practices that involved demonstration and observation, pre-conference meetings, worksite activities, debriefings, and classroom follow-up. The online learning community enabled graduate students to create a network of interactions in which deep learning took place. Cosgrove (2014) noted that "the research in online contexts suggests that student interactivity contributes to positive student learning experiences" (p. 21).

More specifically, the data from the leadership project report revealed that one-fifth of the teachers designed, monitored, and assessed reading achievement progress and helped classroom teachers make the content of their subject

more comprehensible to children so they could truly understand the complex information in their textbooks. Eighty-seven percent of the graduate students agreed or strongly agreed that the size of their group facilitated a high degree of student-student interaction during online discussions, and an equal percent indicated they were able to learn about coaching responsibilities by interacting with each other.

The cooperating teachers' evaluations indicated that 93% of the graduate students coached a team of classroom teachers as they explored and shared ideas about classroom environment, grouping, inclusion, and gradual-release instruction. Eighty percent of the graduate students also presented some workshops in which they modeled best literacy practices and launched some small-group collaboration. Seventy-three percent of the graduate students said that both the synchronous and asynchronous portions in the blended class afforded them the opportunity for more active learning and increased their likelihood to try out ideas/strategies that were explored during online sessions.

Figure 1. Performance data from online classroom participants (mean score = 90.5; score of 3 = outstanding, score of 2 = satisfactory, score of 1 = unsatisfactory).

At least 90% of the graduate students (a) provided professional development focused on establishing an inviting classroom environment and differentiating reading instruction; (b) began organizing a book room for small-group instruction and revitalizing classroom libraries for independent reading; and (c)

initiated professional book studies and conversations about writing instruction. The cooperating teachers were very satisfied with the graduate students' professional development role and said that participants have had successful experiences teaching and mentoring.

The participant reflection paper and group discussions that took place on Canvas suggested that 93% of graduate students served as mentors for classroom teachers who wanted to talk about issues, problems, or ideas about reading instruction and assessment. Ninety-three percent of participants collaborated with a team of classroom teachers in sharing their issues and concerns, developing shared beliefs, investigating and understanding effective literacy practices, and opening up their teaching for reflection. The use of web conferencing to supplement traditional approaches resulted in significantly higher assessment marks and improvement in the quality of learning experience for graduate students. This finding is consistent with previous research that found the use of web conferencing in education positively correlates with deeper levels of learning (Huang & McConnell, 2010). The graduate students reflected at a deeper level and included a variety of perspectives in their descriptions of the coaching experiences. The reflection data fell in the *outstanding* column and had a mean score of 90.

One participant wrote about practicum experiences that included opportunities for working with teachers:

> Working collaboratively with colleagues is an important aspect of being a literacy coach. Communicating results and offering advice during the course of this project gave me a sneak peek of a literacy coach's job. Within the virtual environment, social interaction and connectivity engages us as we learn from each other during leadership project. The collaborative effort helps us achieve a deeper level of knowledge generation.

Ninety-three percent of graduate students felt that using synchronous web conferencing lectures in addition to the asynchronous text-based materials increased their understanding of the course material. Almost 87% said that the advanced online web-enhanced methods course gave them an opportunity to apply and enhance their coaching training. The two major roles identified as most important in participants' ability to serve as a resource to other teachers

were the following: (a) assist teachers by demonstrating ideas and strategies that can improve instruction and assessment, and (b) support teachers in planning and administering professional development. Several characteristics were identified that appeared to lead to successful collaboration. These included *receptive to change, commitment, creating a professional learning community*, and *positive interaction*.

Because this was an online class, graduate students had a potentially higher level of control over the content, and they also had a potentially greater role in shaping the subject matter that was presented in the class through their discussions and questions. The overall results suggested that the web-enhanced class offered considerably more opportunity for students as they developed leadership skills in complex contexts and developed ownership in the learning process. The leadership role emerged as a critical component of literacy coaches, and graduate students grew into leadership positions as they assisted classroom teachers by modeling strategies and suggesting materials that can enhance instruction and assessment and by supporting teachers in becoming more knowledgeable about the teaching of reading. Thus, the results of this study indicate that graduate students gained a better understanding of how to assume a leadership position among their peers. Ninety-three percent of graduate students said that the web-enhanced course helped them become more confident in their ability to guide classroom teachers in their pursuit of instructional growth.

The graduate students logged into the Zoom web conference, employed strategies that encouraged critical thinking, and answered questions about assignments through Canvas. Seventy-three percent said that the synchronous voice, text-chat, note-taking, whiteboard, and screen-sharing functionalities provided powerful tools to present coaching information, model coaching processes, and share coaching concepts with other classmates. Overall, these results suggest that the majority of the graduate students used their knowledge and performance skills to make an impact by demonstrating lessons and communicating and collaborating with classroom teachers. More than 90% of teachers demonstrated lessons, assisted teachers in selecting best literacy practices, trained classroom teachers to administer and interpret assessments, presented professional workshops, conducted study groups, assisted classroom teachers in preparing technologically based information,

assisted with assessment, and co-planned appropriate instruction. These results are consistent with previous research suggesting that when graduate students provide professional development and support to classroom teachers to improve the instructional capacity, their ability to express knowledge of educational concepts and theories within the conventions of academic discourse increases (Blachowicz, Obrochta, & Fogelberg, 2005; Hall, 2004).

Conclusion

The purpose of this study was to determine the impact of a graduate reading methods course offered via synchronous web conference tools combined with an asynchronous component that supports graduate literacy candidates working as literacy coaches and reading specialists. Fifteen reading and writing graduate students received instruction in two different online learning environments (asynchronous text-based lectures using Canvas and synchronous web conferencing lectures using Zoom). The results suggested that both types of online instruction were effective for delivering lectures. In addition, almost two-thirds of the students indicated that they would rather take an online course that uses synchronous web conferencing lectures rather than an online asynchronous text-based lecture course. This finding is consistent with previous research that suggests the importance of synchronous web conferencing collaboration on student satisfaction in a course (Beattie et al., 2017; Shi & Morrow, 2006).

Prior research on online instruction has focused on areas taught via Canvas communication tools. However, further research on the use of newer multimedia technologies, such as interactive synchronous web conferencing tools, is needed. Zoom and Elluminate Live® are examples of synchronous online environments. The advantage of using an electronic communication and discussion medium for learning provides impetus for further integration of this type of technology into university courses (Allen et al., 2004). Various future research components might include measuring (a) the impacts of the course and satisfaction of students in these newer environments; (b) the level of collaboration strategies used between the graduate students and instructors; (c) qualitative data in the form of interviewing graduate students and instructors and reporting their experiences over time; and (d) the level of technological support/barriers graduate students encounter enrolling in a web-enhanced class. Future research should also continue to explore the overall effectiveness

of these environments as instructors use these newer online instruction methods (Skylar, 2009). In addition, whether use of the electronic conferencing medium makes a difference in graduate students' approach to technology in their future teaching might be a subject for a longitudinal study (Bodzin & Park, 2016).

Feedback from supervising teachers in this study was very positive. However, based on this research, the majority of graduate students were not confident about taking on multiple roles within their schools to improve the quality and effectiveness of reading instruction for all children. Nonetheless, while more than 87% of graduate students in this course reported that they were not confident taking on the role of a literacy coach, once they began coaching, they found it to be a rewarding, empowering experience that reinforced their knowledge and skill as a literacy coach. Universities are being challenged to prepare reading specialists who are not only exemplary graduate students but also skilled literacy coaches who can build capacity in other teachers through mentoring and coaching relationships (Spelman & Allman, 2007). Future research is needed to determine how to fully integrate this new role into graduate programs or determine whether universities' literacy programs should reexamine their curricula for reading specialists and give teachers more built-in opportunities to learn how to fulfill major areas of responsibilities as literacy coaches (Vogt, Carr, & Shearer, 2019).

Finally, the data from this study indicate support for a paradigm shift in the way online courses are taught—via two types of online instruction (asynchronous text-based materials and synchronous web conferencing lectures)—to emulate traditional face-to-face lectures. Although research shows that web conferencing can be an effective tool for a variety of professional course offerings, there is little evidence of its usefulness serving as a primary course delivery format in a graduate program. Therefore, future research needs to do a more in-depth comparison study on graduate students' views on web conferencing versus their views on conventional on-campus teaching methods (Beattie et al., 2017; Fuest, 2007; Karabulut & Correia, 2008; Keir & Elizondo, 2010).

References

Allen, M., Mabry, E., Bourhis, J., Tittsworth, S., & Burrell, N. (2004). Evaluating the effectiveness of distance learning: A comparison using a meta-analysis. *Journal of Communication*, 54, 402-420.

Beattie, J., Spooner, R., Jordan, L., Algozzine, R., & Spooner, M. (2017). Evaluating instruction in distance learning classes. *Teacher Education and Special Education*, 25(2), 124-132.

Blachowicz, C. L. Z., Obrochta, C., & Fogelberg, E. (2005). Literacy coaching for change. *Educational Leadership*, 62(6), 55-58.

Bodzin, A., & Park, J. (2016). Factors that influence asynchronous discourse with pre-service teachers on a public, web-based forum. *Journal of Computing in Teacher Education*, 16, 22-30.

Bryer, A. T., & Seigler, D. (2012). Theoretical and instrumental rationales of student empowerment through social and web-based technologies. *Journal of Public Affairs Education*, 8(3), 429-448.

Coffey, W. Z. (2010). Web conferencing software in university level, e-learning based technical courses. *Journal of Educational Technology System*, 38(3), 367-381.

Cosgrove, S. M. (2014). A literacy framework to engage students in online courses: The three Ds. *Journal of Reading Education*, 40(1), 20-24.

Creswell, J. W. (2013). Research design: *Qualitative, quantitative, and mixed methods approaches*. Los Angeles, CA: Sage.

Danielson, C. (1996). *Enhancing professional practice: A framework for teaching*. Alexandria, VA: Association for Supervision and Curriculum Development.

Dillman D. A., Smyth J. D., & Christian L. M. (2014). *Internet, phone, mail, and mixed-mode surveys: The tailored design method*. Hoboken, NJ: John Wiley & Sons.

Durrington, V. A., Berryhill, A., & Swafford, J. (2006). Strategies for enhancing student interactivity in an online environment. *College Teaching*, 54(1), 190-193.

Fuest, R. (2007). How to use virtual classrooms in higher education: A proof of concept cooperation between the University of Freiburg and Adobe. In C. Montgomerie & J. Seale (Eds.), *Proceedings of World Conference on Educational Multimedia, Hypermedia and Telecommunications* (EDMEDIA07) (pp. 662-667). Chesapeake, VA: AACE.

Gambrell, L. B., & Almasi, J. E. (1996). *Lively discussions: Fostering engaged reading*. Newark, DE: International Reading Association.

Hall, B. (2004). Literacy coaches: An evolving role. *Carnegie Reporter*, 3(1). Retrieved from http://www.carnegie.org/reporter/09/literacy/index.html

Harsasim, L. (1990). Online education: An environment for collaboration and intellectual amplification. In L. Harasim (Ed.), *Online education: Perspectives on a new environment*. New York, NY: Praeger.

Hiltz, S. R., & Turoff, M. (2005). Education goes digital: The learning evolution of online learning and the revolution in higher education. *Communication of the ACE*, 48(10), 59-64.

Huang, H., & McConnell, R. (2010). The relationship between synchronous web conferencing and course satisfaction in a blended online class. In J. Luca & E. Weippl (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference 2010* (pp. 546-551). Chesapeake, VA: AACE.

Kanuka, H., Collett, D., & Caswell, C. (2002). University instructor perceptions of the use of asynchronous text-based discussions in distance course. *American Journal of Distance Education*, 16(3), 151-167.

Karabulut, A., & Correia, A. (2008). Skype, Elluminate, Adobe Connect, Ivisit: A comparison of web-based video conferencing systems for learning and teaching. In K. McFerrin et al. (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference 2008* (pp. 481-484). Chesapeake, VA: AACE.

Keir, S., & Elizondo, J. (2010). Utilizing Elluminate to provide professional development for school staff in the Pacific region. In D. Gibson & B. Dodge (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference 2010* (pp. 2748-2753). Chesapeake, VA: AACE.

Li., Q., & Akins, M. (2005). Sixteen myths about online teaching and learning in higher education: Don't believe everything you hear. *Tech-Trends*, 49(4), 51-60.

Offir, B., Lev, Y., & Bezalel, R. (2008). Surface and deep learning processes in distance education: Synchronous versus asynchronous systems. *Computers and Education*, 51(3), 1172-1183.

Palloff, R. M., & Pratt, K. (1999). *Building learning communities in cyberspace: Effective strategies for the online classroom*. San Francisco, CA: Jossey Bass.

Peterson, S. S., & Slotta, J. (2009). Saying yes to online learning: A first-time experience teaching an online graduate course in literacy education. *Literacy Research and Instruction*, 48(2), 120-135.

Quatroche, D. J., Bean, R. M., & Hamilton, R. L. (2001). The role of the reading specialist: A review of research. *The Reading Teacher*, 55(3), 282-294.

Schwartzman, R. (2006). Virtual group problem solving in the basic communication course: Lessons for online learning. *Journal of Instructional Psychology*, 33(1), 3-14.

Shi, S., & Morrow, B. V. (2006). E-Conferencing for instruction: What works? *EDUCAUSE Quarterly*, 29(4), 42-49.

Skylar, A. A. (2009). A comparison of asynchronous online text-based lectures and synchronous interactive web conferencing lectures. *Issues in Teacher Education*, 18(2), 69-84.

Spelman, M., & Allman, T. (2007). Coaching and mentoring in literacy field experiences: A comparison between traditional and purposeful mentoring pairings. *The Reading Professor*, 29(1), 22-29.

Stephens, K. K., & Mottet, T. P. (2008). Interactivity in a web conference training context: Effects on trainers and trainees. *Communication Education*, 57(1), 88-104.

Swartz, S. L. (2005). *The foundation for comprehensive Early Literacy Learning Research Report 1994-2003*. Retrieved from the Foundation of Early Literacy Learning website: http://www.cell-exll.com/foundationresearchreport.htm

Vogt, M., Carr, A. D., & Shearer, B. A. (2019). *Reading specialists and literacy coaches in the real world* (4th ed.). Long Grove, IL: Waveland.

Vonderwell, S., & Zachariah, S. (2005). Factors that influence participation in online learning. *Journal of Research on Technology in Education*, 38(2), 213-230.

Wade, S., Niederhauser, D. S., Cannon, M., & Long, T. (2001). Electronic discussions in an issue course: Expanding the boundaries of the classroom. *Journal of Computing in Teacher Education*, 17, 4-9.

Wang, A. V., & Newlin, M. H. (2000). Characteristics of students who enroll and succeed in psychology web based classes. *Journal of Educational Psychology*, 92(1), 137-143.

Passing Score, Failing Performance?
A Study of the edTPA as a Valid Predictor
of First-Year Teacher Success

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Abstract

The purpose of this study was to explore in depth first year elementary and secondary teachers' perceptions of the edTPA portfolio and its ability to predict the success of these teachers during their first year in the classroom. This study utilized the case study methodology approach to investigate the efficacy of the edTPA program through the perceptions of former program participants and now, current teachers. Seven qualified participants were interviewed. Participants were purposefully selected based on their completion and personal experience with edTPA. All participants were classroom teachers who successfully completed edTPA and had a minimum of three years teaching experience. Four of the teachers interviewed taught in an elementary classroom, with the remaining three participants teaching in the secondary classroom. Three themes emerged from the research findings from this study. First, there is a disconnect between edTPA terminology and first year teachers' classroom experience. A second theme is that edTPA is not a capable judge or determiner of a first-year teacher's success in the school. The third theme suggests edTPA does not evaluate critical areas that are vital to the success of a first-year teacher, such as include parent and classroom management. Implications for practice from this study show that faculty and administration involved in EPP programs should consider re-evaluating the amount of preparation given to teacher candidates as they are completing their educator preparation program. There is a significant lack of continuity between the terminology and theory

surrounding edTPA and the exposure teacher candidates have to these factors within the method course. Coordinators of educator preparation programs should also investigate the potential of losing a potentially good teacher due to a low edTPA score and provide additional training throughout the educator preparation program. In light of all participants interviewed expressing their disagreement that edTPA should be the only test for future teachers as well as an indicator of the success of a first year teacher, future studies are necessary to see if this disconnect between the teacher and the test can be repaired.

KEYWORDS: edTPA, educator preparation

Introduction

One of the most critical challenges in the area of K-12 education is the preparedness of new teachers entering the classroom. Many colleges across the nation have educator preparation programs (EPPs). These programs seek to provide future teachers the skills necessary to not only be a successful teacher in light of academic performance but also to effectively work with their students in areas such as social, physical, and emotional growth. Although graduation from an EPP or education preparation program is often understood as the litmus test of teacher preparedness, often, students graduate from a college educator preparation program unprepared for a successful first year as a teacher. According to Aldeman & Mitchel (2016),

> In the current system, once a candidate meets the state requirements, her teacher preparation program recommends her for licensure. This is a flawed arrangement. Most preparation programs make recommendations based on the completer's academic performance and a limited amount of (perhaps under supervised) student teaching experience. But, as noted above, there is no guarantee that these experiences create a teacher who is prepared to be effective on Day One. (p. 21)

According to Scherer (2012), "It is essential for beginners to have systematic, intense mentoring in the first year. Having weekly support and in-classroom coaching in the first year for fine-tuning skills, for planning lessons, and for problem-solving about things that come up in the classroom ensures that someone experienced is there during the critical moments of the beginning

teacher's first year" (p.18). This concept certainly has merit; however, the success of this theory relies heavily on the quality of the faculty within the school. Having a strong group of experienced faculty assisting and mentoring pre-service teachers can be very helpful, but often the support is either limited or often non-existent.

The Educative Teacher Performance Assessment (edTPA), created by the Stanford Center for Assessment, Learning, and Equity (SCALE) in 2010, is a high-stakes teacher performance assessment used to evaluate teacher candidates' readiness for effective teaching (Seelke, 2018; Zhou, 2018; Dobson, 2013). It was first introduced in two extensive field tests in 22 states and 160 institutions of higher education in 2011 and became the first educator-designed performance assessment for teacher candidates available nationwide in 2013 (Darling-Hammond, 2013; Goldhaber, Cowan & Theobald, 2017; Burns, Henry & Lindauer, 2015; Parkes & Powell, 2015; Dobson, 2013). Its use has grown to nearly 700 educational preparation programs in 41 states (Zhou, 2018; Sowder, 2017).

The assessment is a portfolio created by teacher candidates that documents an authentic classroom teaching experience and measures the candidate's ability to plan, instruct, and assess for student learning (Zhou, 2018; Gouraige, 2016). The portfolio consists of three tasks aligned to fifteen rubrics focused on genuine work created by the teacher candidate. The three tasks are aligned with criteria of effective teaching as defined by research and theory, such as knowledge of content and pedagogy, instruction based on students' needs, and assessment of whether if and what students are learning (Adkins, 2015; Brown, 2018; Pecheone & Whittaker, 2016). The portfolio is the application of knowledge gained from coursework taken in teacher preparation programs at higher learning institutions. Teacher candidates submit evidence of their knowledge and skills through lesson plans, assignments and assessments, feedback on student work, and video clips of their instruction (Sowder, 2017). All tasks and evidence placed in the portfolio by the teacher candidates are analyzed, by the candidates themselves through reflection. The primary responsibility of the teacher candidates when compiling the evidence is to evaluate the effectiveness of each instructional decision they made and determine to what extent students learned from the instruction they provided. The edTPA is said to be educative, in that its completion facilitates continuous

learning in a real-world environment for every person involved in the process, as well as transformative for assessing teaching ability not available in the past (Seelke, 2018; Burns et al., 2015; Butler, 2015; Parkes & Powell, 2015; Peck, Singer-Gabella, Sloan, & Lin, 2014).

The edTPA has garnered much support from national organizations and key educational researchers. The American Association of Colleges for Teacher Education (AACTE) and the American Federation of Teachers (AFT) both endorsed the edTPA because of its strong alignments to the National Board Model, standards for both the Interstate Teacher Assessment and Support Consortium (INTASC) and the Council for Accreditation of Educator Preparation (CAEP), and common core state standards (CCSS) (Parkes & Powell, 2015; Sowder, 2017; Gouraige, 2016; Darling-Hammond, 2013). While EPPs are still skeptical about the edTPA being the answer to what ails the teaching profession, it is positively viewed as the answer for right now to provide teacher candidates a dress rehearsal of the full instructional process before full-time employment.

Both educational and non-educational entities have called for more focused efforts to improve preparing and retaining highly qualified teachers. In 1986, the Carnegie Forum on Education released "A Nation Prepared," a report calling for an overhaul in educator preparation, which led to the creation of the National Board for Professional Teaching Standards (NBPTS) in 1987 (Seelke, 2018). The National Board standards have raised the bar for all classroom teachers by clearly identifying behaviors and practices that effective teachers use daily. The American Recovery and Reinvestment Act of 2009 mandated states develop and implement systems to improve teacher effectiveness (Parkes & Powell, 2015). This led to many states requiring schools to declare each classroom as having a "highly qualified" teacher of record, thereby ensuring equity for students regardless of socio-economic factors. This act is especially important since research has shown that an effective teacher is the most critical within-the-school-walls factor that impacts student learning (Campbell, Ayala, Railsback, Freking, McKenna, & Lausch, 2016).

Teacher EPPs education programs have made marginal efforts to assist in the development of new teachers who are competent decision-makers on day one when they assume leadership of a classroom (Gouraige, 2016; Adkins, 2015). Providing real-world, hands-on experiences to teacher candidates early

in teacher education courses is just one example of these efforts. Additional preparation might include the elimination of summative assessments of pedagogical knowledge to a performance assessment. Utilizing performance assessments like the edTPA, along with other measures, is an acceptable means to measure the effectiveness of teacher education programs and their training of well-prepared and qualified beginning teachers (Peck et al., 2014; Sowder, 2017; Dobson, 2013). The tasks of the edTPA performed in a classroom with actual students give teacher candidates a well-directed, process-supported practice run of what their career will expect of them. Historically, between 40% to 50% of all teachers leave the profession within the first five years. In light of that, it is increasingly vital EPPs prepare teachers for the rigor and challenges of 21st-century classrooms (Goldhaber et al., 2017).

Typically, candidate readiness is determined by the faculty and licensing officers in the EPPs at institutions of higher learning (Dobson, 2013). This decision is often supported by grades in coursework and success on multiple-choice standardized tests to measure content and pedagogical knowledge. This is because grades and tests are easy to compute and compare across teacher candidates. However, the development of new performance assessments like the edTPA is providing these programs with real-world evidence to evaluate the quality and readiness of teacher candidates (Darling-Hammond et al., 2013). While existing research focusing on the edTPA assessment is still limited in scope, it is widely accepted that those teacher candidates who score well on the edTPA are more likely to be effective teachers (Burns et al., 2015). This idea is also supported by Tigert (2018), saying, "proponents of the edTPA assert that setting and assessing rigorous standards for TCs will lead to higher quality teaching and increased student achievement" (p.14).

Teacher performance assessments showcase an abundance of knowledge and skills that directly correlate with teaching ability by requiring teacher candidates to complete a portfolio during their capstone teaching experience (Brown, 2018). While research specific to the edTPA is continuing to evolve, there is abundant research available concerning teacher performance assessments (TPA). In one such study, researchers found that teacher candidates' overall scores on a TPA, known as the PACT (Performance Assessment of California Teachers), are significantly predictive of student achievement scores in both language arts and mathematics (Seelke, 2018). Research within the past

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20 years has indicated that PACT showed teacher candidates' scores were significant predictors of their teaching effectiveness, particularly in language arts and mathematics (Parkes & Powell, 2015). Studies also found positive correlations between PACT scores and student achievement (Goldhaber et al., 2017; Parkes & Powell, 2015). In 2006, Pecheone and Chung concluded that TPAs could be used as reliable predictors of teacher competence for licensure, useful opportunities for teacher candidates to analyze their practice, and basis for program improvement of teacher preparation programs (Brown, 2018; Peck et al., 2014). An additional study conducted by Sowder (2017) concluded that EPPs that require a capstone portfolio project produce significantly more effective first year teachers (Sowder, 2017). Seelke (2018) addressed approximately ten studies that determined the completion of TPAs can improve teacher effectiveness. First year teachers reported they learned primarily by engaging in the PACT assessment and utilizing the practices learned in the assessment process once in their classrooms (Darling-Hammond et al., 2013). With research suggesting a potential positive correlative relationship between teacher candidates' successful completion of TPAs and observed teacher effectiveness, it is thereby reasonable to look to the edTPA as a potential predictor of teacher effectiveness on the job.

Available research concerning the validity of the edTPA and a candidate's score has supported differing outcomes. A recent study by Goldhaber et al. (2017) determined that passing scores on the edTPA were highly predictive of teacher candidates being employed the following year and significantly predictive of teacher effectiveness in reading. Another study determined that candidates' edTPA scores and state measures of teacher effectiveness were loosely connected (Seelke, 2018). Research by Lin (2012) supports the edTPA as an educative tool for teachers, particularly regarding good teaching being student-centered, and also deepening their reasoning about instructional decisions and knowledge about their students (Peck et al., 2014). In a study by Zhou (2018), teachers stated that the edTPA planning task supported their classroom experience as beginning teachers and that videotaping their teaching strengthened their ability to reflect. In fact, in six additional studies, participants frequently stated that videotaping a lesson and then reflecting on their instruction had a positive impact on their practice (Seelke, 2018). The purpose of this study was to explore in depth first year elementary and secondary teachers' perceptions of the edTPA portfolio, and the program's ability to predict the success of these teachers during their first year in the classroom.

Research Methodology

For this study, a qualitative case study methodology was utilized because of the depth of insight and perspective that emerges through qualitative research. Participants were purposefully selected based on their completion and personal experience with the edTPA. The richness and depth of such personal data appear in part because qualitative research is personal (Patton, 2015). The participant's own experience with the edTPA as well as experience post the edTPA provides the participants with a unique perspective on the effectiveness of the edTPA program.

Qualitative research includes a plethora of research methodologies. This study utilized the case study methodology to investigate the efficacy of the edTPA program through the perceptions of former program participants who are now current teachers. Leading scholars agree that the case study method utilized in qualitative research allows the case study design to be flexible to include a variety of methodological approaches (Dumez, 2015; Merriam & Tisdell, 2016; Patton, 2015). According to Creswell (2007), a case study is a qualitative approach "in which the investigator explores a bounded system (a case) or multiple bounded systems (cases) over time through detailed, in-depth data collection involving multiple sources of information, and reports a case description and case-based themes" (p. 73).

Patton (2015) defines case study research as "a detailed and rich story about a person, organization, event, campaign, or program - whatever the focus of the study (unit of analysis)" (p. 259). In this study, the perceived effectiveness of the edTPA is the unit of analysis, and the "detailed story" is the teachers' perceptions of the unit of analysis. By seeking the teachers' opinions, students have an opportunity for reflection regarding the edTPA, and reflection is one goal of case study research. Peter Freebody (2003) writes that "the goal of a case study in its most general form is to put in place an inquiry in which both researchers and educators can reflect upon particular instances of educational practice" (p. 81).

Case studies are useful with various sample sizes. This study (N=7) will employ a collective case study (or multiple case study) in which "the one issue or concern is again selected, but the inquirer selects multiple case studies to illustrate the issue" (Creswell, 2007, p. 74). A case study methodology is useful when researchers seek a holistic, detailed analysis of the issue through the

selected cases. This research study utilizes the case study approach to fit the research parameters in that the one unit of analysis that was selected, namely the perceived effectiveness of the edTPA program of religious studies teachers regarding the importance of religious literacy, would most effectively illustrate the issue (Creswell, 2007).

At the time the research was conducted, seven qualified participants were interviewed. All participants were classroom teachers who successfully completed edTPA and had a minimum of three years of teaching experience. Four of the teachers interviewed taught in an elementary classroom, with the remaining three participants teaching in the secondary classroom. Incorporating both elementary and secondary teachers' interviews provided the study with more teacher-centered findings that were not specific to either elementary or secondary classrooms. Findings from the interviews were coded, and resulting themes were noted. Then corroborating themes were established.

Research Findings

The purpose of this study was to explore in-depth first year elementary and secondary teachers' perceptions of the edTPA portfolio and the ability of the process to predict the success of these teachers during their first year in the classroom. Themes were determined by concepts, terms, keywords, and consistent ideas that appeared across the research data. As the data were analyzed, three dominant themes emerged. The first theme, titled "disconnect between edTPA terminology and first year teacher's classroom experience," suggested the edTPA process was found to be very difficult and hard to understand, and there existed a strong disconnect to edTPA verbiage used in the edTPA portfolio's requirements and what teachers understood from their EPP and what they used in their classrooms. The second theme suggested that the edTPA was not a capable judge or determiner of a first year teacher's success in the school. The third theme suggested the edTPA did not evaluate areas that were critical to the success of a first-year teacher, which included parent and classroom management.

In their EPP programs, all teachers had taken at least four methods courses before they took the edTPA. This is an essential factor in light of the suggestion that these teachers found the edTPA difficult and that they were unfamiliar with terms and directives used in the portfolio. Karen noted, for example, "None

of my courses talked about the edTPA in length until my seminar class in my senior year. I had taken all of the required educational classes."

It appears these teachers did not have a good foundation or introduction to the edTPA process before they completed the portfolio. The lack of foundation within the methods course was supported by Cronenberg et al. (2016), who stated, "getting it right did not require better teaching, planning, assessing or reflection on our part or the students; it did require preparing students to write the portfolio materials in the correct way and put them in the correct format" (p.110).

Support seems to have come from outside methods courses and originated from other faculty who served as a mentor or advisor as students completed their portfolios. This could explain why a prevailing thought throughout the majority of the interviews suggested the help they received was more superficial and lacked depth.

> I found myself completing a large portion of the writing work over one day. This led me to feel stressed and confused throughout the process. I felt like the help or assistance received was mostly superficial and did not give me the substantial support I needed. However, I was able to complete the process, turn in my work and earn a passing score (Ellen).

One of the challenges for EPP programs is to be able to integrate edTPA elements into the methods courses. Back mapping in methods courses to expose students to the terminology of the edTPA and allowing them to be introduced to edTPA concepts and framework has been experimented with in many EPP programs. According to Baron (2019), many elements of the edTPA had been incorporated; however, it was felt that "the reflection and analyses requirements in edTPA were already key components of candidates' evaluation, however, we had to integrate edTPA's language into early courses to ensure familiarity and practical understanding as candidates progress through the program" (p.71).

Teacher candidates also expressed that the edTPA did not evaluate specific vital issues that are important for a first-year teacher to be successful. Every teacher interview pointed to at least one area interviewees deemed relevant for

the success of the first year teacher that was not covered or evaluated within the edTPA portfolio framework. One key sub-theme that emerged from the data was that the area that was overlooked within the portfolio was the area of small group instruction as well as parent management. One participant noted,

> The main area that I deal with now that was not addressed in edTPA is a small group instruction. I wish that my college courses and the edTPA had better equipped me to create and teach small group instruction (Sue).

As the teachers reflected upon their first year in the classroom and their performance on the edTPA, it became apparent that a correlation to the overarching focus of study was needed. A majority of the teachers suggested that the needed skills to be a success in the first year classroom were not addressed and created a question of whether achieving a passing score would indicate a readiness to be successful. Au (2013) stated "several of my current students felt a professional split from the edTPA, too. Three have told me directly that they did not feel that the edTPA accurately reflected their teaching, and so they taught to the test by developing materials specifically and only for the edTPA" (p.25). One teacher suggested this fallacy that a passing score would equal success in the classroom as he reflected on his edTPA experience.

> I had one classmate that scored higher than anyone that barely made it through one quarter in his first year. He knew how to pass the edTPA but did not do well in his first year. (Nick)

The final theme that emerged from the research study spoke directly to the overall focus of the study. The theme addressing whether the teachers felt the edTPA was a good judge or indicator of a first-year teachers' success was the one theme in which all teachers interviewed expressed the same belief. After carefully analyzing the data, 100% of teachers interviewed stated they did not believe that the edTPA was a good judge or indicator of a first year teacher's success. It was also evident that each teacher was unequivocal in his or her opinion, and it was expressed with a measured level of certainty.

When asked if she felt that the edTPA was a good judge or indicator of a first year's teacher's potential success, Susan noted,

> I disagree with this. I believe that an intern completing the
> edTPA could make themselves sound like a better teacher than
> they are because their success on the edTPA is, for the majority,
> based on what they put on paper. A first-year teacher's success
> is based on so much more than the edTPA can assess. It is
> based on relationships, passion, consistency, and hard work,
> not just work for 3 – 5 lesson plans.

As Susan noted, there seems to be a disconnect between the success of the teacher on the edTPA and the progress that is evident in the classroom of a first-year teacher. Several of the teachers also expressed that success on the edTPA as well as in the school of the first-year teacher is dependent on other variables that factor into the edTPA process. A subtheme of the idea of the edTPA as an indicator of success is the lack of "equitable" help among all edTPA candidates. Several teachers mentioned that success on the edTPA, as well as in the first year of a teacher's career, is affected by the school the candidate is doing the edTPA in as well as the mentor support that is given during the process. One observed,

> I believe that the stress the edTPA causes outweighs the
> benefits from it. I think that teacher candidates are greatly
> affected by the type of school they are in and the type of mentor
> teacher they get. My mentor teacher only did it for the money
> the school gave her. She told me this. I had friends who had
> terrific mentor teachers, and they scored much better than me. I
> believe the scorers did not take that kind of stuff into account as
> they should (Karen).

There was not a teacher interviewed that agreed with the statement that the edTPA was a good judge of the potential success of a first year teacher. Each teacher seemed to have different reasons for their belief, but they all agreed on their assumption. It should be noted that these teachers included both elementary and secondary educators and were taken from two different EPP programs from two universities in two states.

Implications
Based on the interviews, teachers had strong feelings concerning the edTPA. Seventy five percent of teachers interviewed felt the edTPA did help them

in certain areas, including organizing lesson plans, as well as differentiating instruction. It was also clear that all of the teachers had completed all of the required methods courses that were prescribed by their respective EPP programs. This would tend to suggest that all of these teachers were prepared for the edTPA and their first year in the classroom. According to Clark – Gareca (2015), "what has evolved as a result of this process is that edTPA has become an organic part of these courses. Lesson planning, though always a strong focus in these courses, has taken on new importance as we consider which elements of edTPA planning are aligned with our curriculum and which are not" (p.213).

Utilizing the information from this study, faculty and administration involved in EPP programs need to re-evaluate the amount of preparation given to teacher candidates as they are completing their program. The results revealed that there was a significant lack of continuity between the terminology and theory surrounding the edTPA and the exposure they have to these factors within the methods course. The edTPA coordinators in the EPP programs should also investigate the potential of losing a potentially good teacher due to a low edTPA score. Should there be other criteria set in place to have an accurate picture of the potential success of a future teacher? McKenna and Polka (2016) suggest some uncertainty in regards to the edTPA. They question whether the score on a test reveals someone is a good teacher and whether it determines if the teacher can interact with students. Are we allowing those who, as stated in one of the interviews, know how to look good on paper, but yet are not able to perform, to take place in the classroom of someone who did not do well on the edTPA but has all of the characteristics of a good teacher?

Summary and Conclusion

Although the researchers believe the experiences of these participants depicted in this study represent the beliefs of teachers who have taken the edTPA, additional research is needed to add to the body of knowledge to this topic. Due to the fact that some of the participants came from an EPP program that has only been working with the edTPA for two years, this could be a potential deficiency. While the implementation of the edTPA in states across the county is still emerging, caution should be used in the amount of weight given to the success of students on the edTPA. The researchers recognize that each student is different and that their perception of the edTPA is different; however, the researchers are confident in the three themes that emerged from this study.

Because this study was designed to utilize a case study of qualitative analysis, quantitative methods should also be encouraged. Although the researchers are comfortable with the findings of the study, they do recognize that, like any study, there are limitations. A more extensive survey of edTPA teacher candidates may provide new insight and findings. It is also understood that there may be some differences in future studies surrounding this topic if a focus is centered on elementary or secondary teachers exclusively.

Having analyzed the data for this study, the researchers can not overemphasize the tremendous pressure that candidates who are taking the edTPA experience, as revealed in the data. The realization that future employment may rest on the score of a portfolio can be daunting for all prospective teachers. In light of all teachers interviewed expressing their disagreement that the edTPA should be the only test for future teachers as well as an indicator of the success of a first year teacher, future studies are necessary to see if this disconnect between the teacher and the test can be repaired.

Appendix A

1. What year did you take the edTPA

2. What was your score?

3. What subject did you submit the edTPA portfolio?

4. Are you presently teaching in that area now?

5. How many "methods" classes did you take in your educational program before taking the edTPA.

6. What was your experience taking the edTPA:

7. Did you have assistance from a mentor or faculty as you took the edTPA or did you complete it on your own

8. Did you feel that the edTPA covered "areas" that you also dealt with within your first year of teaching such as lesson plans, differentiated instruction, working with personal, cultural assets of students as well as analyzing assessments?

9. Based on a percentage, what percent of the edTPA portfolio was in direct correlation with what your first years' experience was?

10. The edTPA portfolio is a good "judge" or "indicator" of a first year's teacher's success in the classroom, agree or disagree, and why?

11. What percentage of the areas covered in the edTPA Portfolio was also included in your methods classes in your educational program.

12 What areas did you deal with within your first year as a teacher that was not addressed in the edTPA?

References

Adkins, A. (2015). Teachers need a "road test" to ensure good teaching. *Education Digest*, (5), 55.

Aldeman, C., Mitchel, A. (2016) No guarantees: Is it possible to ensure teachers are ready for day one? Retrieved April 28, 2020, from http://bellwethereducation.org/.

Au, Wayne. 2013. "What's a nice test like you doing in a place like this?" *Rethinking Schools*, 27(4).

Barron, L. (2019). *A practical guide for edTPA implementation*. Information Age Publishing p. 71.

Brown, C. S. (2018). Were they ready? An analysis of a teacher performance assessment to determine if perception was matched by reality. *Issues in Teacher Education*, (3), 107.

Burns, B. A., Henry, J. J., & Lindauer, J. R. (2015). Working together to foster candidate success on the edTPA. *Journal of Inquiry and Action in Education*, 6(2), 18–37.

Butler, M. (2015). Three ways edTPA prepared me for the classroom. *Educational Horizons*, 93(3), 30.

Campbell, C., Ayala, C. C., Railsback, G., Freking, F. W., McKenna, C., & Lausch, D. (2016). Beginning teachers' perceptions of the California Teaching Performance Assessment (TPA). *Teacher Education Quarterly*, 43(2), 51–71.

Clark-Gareca, B., (2015). Where practicum meets test preparation: Supporting teacher candidates through edTPA. *The Catesol Journal*, 27(2) 211 – 220

Darling-Hammond, L., & Hyler, M. E. (2013). The role of performance assessment in developing teaching as a profession. *Rethinking Schools*, 27(4), 10–15.

Darling-Hammond, L., Newton, S. P., & Wei, R. C. (2013). Developing and assessing beginning teacher effectiveness: The potential of performance assessments. *Educational Assessment, Evaluation and Accountability*, 25(3), 179. https://doi.org/10.1007/s11092-013-9163-0.

Dobson, E. E. (2013, January 1). Examining the impact of early field experiences on teacher candidate readiness. *ProQuest LLC*. ProQuest LLC.

Goldhaber, D., Cowan, J., Theobald, R., & National Center for Analysis of Longitudinal Data in Education Research (CALDER) at American Institutes for Research. (2016). Evaluating prospective teachers: Testing the predictive validity of the edTPA. working paper 157. *National Center for Analysis of Longitudinal Data in Education Research (CALDER)*. National Center for Analysis of Longitudinal Data in Education Research (CALDER).

Gouraige, T. D. (2016). *An exploratory study into the nature of the relationship between pre-service teacher fixed factor characteristics and edTPA performance ratings*. Doctoral Dissertation, Seton Hall University.

Parkes, K. A., & Powell, S. R. (2015). Is the edTPA the right choice for evaluating teacher readiness? *Arts Education Policy Review*, 116(2), 103–113. https://doi.org/10.1080/10632913.2014.944964

Peck, C. A., Singer-Gabella, M., Sloan, T., & Lin, Susan L. (2014). Driving blind: Why we need standardized performance assessment in teacher education. *Journal of Curriculum & Instruction*, 8(1), 8–30. https://doi.org/10.3776/joci.2014.v8n1p8-30

Polka, W.S., McKenna J.E. (2016) *Confronting Oppressive Assessments*, Lanham, MD: Rowman and Littlefield Press.

Pecheone, R., & Whittaker, A. (2016). Well-prepared teachers inspire student learning. *The Phi Delta Kappan*, 97(7), 8.

Sherer, M (May 2012) The challenges of supporting new teachers. *Educational Leadership* 69, 18 – 23.

Seelke, J.L. (2018). *Teachers' perceptions of edTPA on their practice* (Doctoral Dissertation). https://doi.org/10.13016/M28S4JS7W.

Sowder, M. (2017). Pushing forward: Finding and using meaningful evidence of beginning teacher competency. *Journal of the Utah Academy of Sciences, Arts & Letters*, 94, 217–227.

Zhou, M. (2018). edTPA as a tool to measure teacher readiness: A case study on first year teachers. *Georgia Educational Researcher*, 14(2), 51–68.

School Safety:
Building Relations Between District
Leadership and School Resource Officers

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Abstract

Can any school or law enforcement official completely guarantee the safety of students and staff? Is the cost to protect students ever too high? Is the work ever too great? The answer to the three questions listed above is a definite no. Safety for students and staff must be at the top of each student, staff, parent, and community member's "back-to-school list." Yet, questions remain as to the most effective ways to address school safety problems. This study examined the effectiveness of the training of school resource officers, SROs, as required by Kentucky's Senate Bill 1. Specifically, this research sought to delineate the ways administrators understand the role of SROs, compared to how SROs understand their role. Of concern was any disconnect between administrators and officers over role assignments, as such a gap might imperil safety enforcement.

Introduction

Educators, the general public, national leaders—most importantly—students have long been concerned about safety in educational environments. Gavin (2018), for example, reported on students' feelings of worry caused by school violence, noting,

> After hearing news of school shootings or other violence, it's natural for students – no matter how old they are or where they go to school – to worry about whether this type of incident may someday happen to them or their friends. When a tragedy like this happens, it's normal to feel sad and anxious, and to want to make sense of the situation. (p. 6)

Another report noted that youth violence in schools and communities continued to be the "second leading cause of death for adolescents" (Volungis & Goodman, 2017). Larson & Mark (2014) asserted that life in public education had essentially changed due to violence, observing,

> There is no denying that the high-profile school shootings that occurred in the late 1990s changed the face of public education in the United States. Doors that were once opened were now locked, and a new and chilling vocabulary emerged. Terms such as *threat assessment, risk factors, school shooter*, and *hit list* made their way into the school lexicon. (p. 231)

Bardick & Bernes (2008) concurred, observing that "In the wake of tragic incidents, such as school shootings, the subject of school violence has gotten more attention in the past decade than in previous years" (p. 9). Researchers have also found that "Violence such as high-profile school shootings can cause concern within school communities, even if they are not directly affected by the event(s)" (National Association of School Psychologists, 2015). Examples of high-profile school shootings include Columbine High School (Colorado), Marjory Stoneman Douglas High School (Florida), Heath High School (Kentucky), Marshall County High School (Kentucky), and Sandy Hook Elementary (Connecticut).

Unfortunately, these school shootings were only the tip of the iceberg. The obvious random and varied geographical locations where these school shootings had occurred served as proof that violent acts in schools were not limited to one geographic area, nor were they tied to an isolated demographic of the population. Mass school shootings have the potential to touch every child and teacher's desk, disregarding any-and-all boundaries. Thus, the questions on the minds of many educators, parents, and community members were as diverse as the geographical locations of the violent acts: How did this begin? When will it end? How can it be prevented? Are schools and communities doing enough?

School Resource Officers

The FBI has stated that school shootings are preventable through the effective use of threat assessments by a team of educators and law enforcement, working together, to identify if a possible shooter is demonstrating a high level of risk and on a path toward violence (Federal Bureau of Investigations, 2019).

The U.S. Department of Education (2007) shared these observations to address school violence at various levels:

> High schools were more likely than primary schools to implement safety and security procedures, while primary schools were more likely than high schools to promote training for parents to deal with students' problem behavior. Also, schools in rural areas showed different patterns of practices than those in urban areas, with rural schools more likely to use dogs for random drug checks and less likely to use other practices—such as student uniforms, involving parents at school to maintain discipline, and random metal detector checks. (p. 3)

One of the most recent ways of addressing the problem has been the addition of a School Resource Officer. Thomas, Towvim, Rosiak, & Anderson (2013) noted the support for SROs based on survey results gleaned from stakeholders, including students, police officers, members of the community, and educators. The survey results revealed the following about the perception of what SROs do,

- increase feelings of safety among students, teachers, and administrators;

- deter aggressive behavior and empower staff to maintain order and address behavioral issues in a timely fashion;

- diminish classroom time spent on discipline and behavioral disruptions;

- improve school safety and reduce school-based crime;

- increase the likelihood that students report witnessing a crime and help reduce community-wide criminality; and

- improve relationships between law enforcement and youth. (p. 3)

The Department of Justice defined an SRO as the sworn authority in a school, many times a career officer, responsible for collaboration with school personnel to address growing safety needs (Hoppe, 2019). The existence of SROs in schools continued to grow throughout the United States because of the increase of school violence which, in turn, is driving additional state and federal

funding, implementation of threat assessments, and development of safety plans. The premise was that the presence of SROs alone should be a deterrent against school violence. Thus, educators, students, and the community are asking the question, "What exactly are the roles, responsibilities, and benefits of an SRO on a school campus?"

The roles and responsibilities of the SRO were described by the National Association of School Resource Officers (NASRO) as an "educator, informal counselor, and law enforcer." The three functions, as designated by NASRO, combined to form a Triad Model, and SROs were trained according to this method. (National Association of School Resource Officers, 2012, p. 21). Most students and staff understood the traditional role of SROs as law enforcement agents, which may have included search and seizure of weapons or drugs, investigations, and, most importantly, protection and service for the students and school community. Conversely, students and staff may not have be aware of the other functions, to protect and educate, performed by SROs. NASRO (2012) listed the following:

- sharing important information with staff, students, and the community concerning safety issues

- collaborating with other agencies, for example, social workers, court liaisons, and mental health providers regarding student needs

- performing emergency drills and coordinating safety measures for large school and community events

- serving as teachers or guest lecturers to instruct on topics of bullying, drinking and driving, character education, healthy-lifestyle programs, study skills, drug prevention, gun safety, and many more

- mentoring students to make good choices, improve study skills, and complete homework assignments

- encouraging service-oriented activities by volunteering in the community

- guiding administrators on emergency management and safety plan development

- connecting other law enforcement agencies by increasing two-way communication and collaboration

Through collaboration, SROs provided many benefits between schools and law enforcement agencies. Thus, NASRO (2012) recommended every school should have at least one SRO per campus to provide additional assistance which would likely lead to the following:

- decreasing calls to 911 by schools

- preventing crimes from occurring

- developing stronger relationships between the agencies

- improving the image of law enforcement officers with the students and community

- lessening the workload of patrol officers (p. 26)

These benefits were not the only possible advantage seen for schools. Chris Barrier (2019), President of the Kentucky Association of School Resource Officers, made the following statement regarding the benefits of having an SRO:

> No matter how the task is accomplished, the impact a school resource officer can have on student achievement is simply immeasurable. One of Maslow's basic hierarchy of needs is the need for safety. A student simply cannot make the necessary emotional connection with a teacher, to be taught essential curricula, without first feeling safe. This is why school resource officers are such valuable mentor/counselor pieces in the school environment. (p. 13)

Barrier's above statement allows one to infer that the presence of SROs in a school can positively impact instruction and learning. The organization Safe Schools Healthy Students concurred, observing, "Feeling safe in school is intrinsically connected to achieving educational outcomes for students and educators alike" (Thomas, Towvim, Rosiak, & Anderson, 2013, p. 1). With increasing school violence, students and staff will likely experience difficulty focusing in the classroom. SROs can help to meet the need for students and school personal feeling safe by their presence alone.

Other researchers and organizations, besides NASRO, agreed with the advantages of the presence of SROs in working with juveniles but urged

caution. In an article, "Preventing School Violence: Assessing Armed Guardians, School Policy, and Context," the authors indicated SROs were very helpful at the high school level in addressing bullying, disrespect, gang activity, and racial tensions (Crawford & Burns, 2015, p. 633). However, other research indicated that while providing armed guards or security personnel was beneficial, law enforcement should not be the centerpiece of a school's plan or policy for preventing violence (Crawford & Burns, 2015, p. 645). There must be a balance between enforcing the law, mentoring students, and teaching preventative life skills. Clear distinctions in responsibilities and training must be provided for the SROs and educators in helping improve the school climate and developing a safe learning environment, while not placing students at-risk for unnecessary arrests or disciplinary consequences.

Stakeholders' perceptions of the roles of the SROs in Kentucky schools

One of the biggest challenges facing school administrators and SROs is building productive relationships with one another. Educational and law enforcement work environments and duties are very different in regard to methods and strategies. In "The Final Project Report" from the National Assessment of School Resource Officer Programs (2005), school administrators conveyed three primary concerns about working with an SRO in their building:

- Who's in charge?

- Who makes the decision to arrest?

- Why isn't "my" SRO available all the time? (p. 45)

The report continued to state that these concerns were overcome with time through development of working relationships and collaboration between stakeholders. Thus, just the presence of an SRO is not enough. There must be collaboration between law enforcement and school personnel to create an effective working relationship. Following the tragedy at Marjory Stoneman Douglas High School, for example, a report by the Federal Commission on School Safety asked tough questions concerning the training of educators and SROs following the shooting. "Effective training is critical, making it imperative that schools regularly review training protocols to ensure that every SRO, SSO, teacher, administrator, and student is prepared as possible to respond to incidents of school violence within the framework of a comprehensive school

safety plan" (Federal Commission on School Safety, 2018, p. 101). The report went on to stress the importance of state education agencies, such as the Kentucky Department of Education, emphasizing unifying training between SROs and school personnel "to help create and sustain a safe environment for students and educators" (Federal Commission on School Safety, 2018, p. 102).

States such as Virginia, Ohio, Indiana, and Kentucky compel SROs to complete specific training. However, training for school personnel, such as administrators, regarding the collaborative relationship with SROs is not required. The Federal Commission on School Safety, however, strongly recommended school administrators should be required to complete training on roles and responsibilities of SROs, to ensure a strong working relationship for the safety of students and staff (Federal Commission on School Safety, 2018, p. 106).

Certainly, the roles of administrators of schools and SROs are very different, yet, they all share a common goal to protect children. The amount of current research on this issue, however, was sparse. The North Carolina Department of Juvenile Justice (2002) conducted research on administrators and SROs working together. In this study, it was found that SROs advised other SROs to keep the lines of communication open, be flexible, and keep administrators informed. The study group of administrators advising their counterparts suggested making time to teach SROs about the school, viewing the SRO as a trained professional and equal partner, and communicating with one another. One important piece of advice to both groups was the "students are watching how the SRO and Administrator work together" (p. 6).

Because of so little research on this important matter, this research sought to delineate the ways administrators in several school systems in Kentucky understood the role of SROs in their schools compared to how SROs in the same systems understood the role of administrators in directing the SRO process. Rosiak (2014) emphasized the importance of defining roles and responsibilities between administrators and SROs prior to beginning a program. Otherwise, the lack of preparation proved detrimental to the success of the partnership. His findings determined this was a frequent mistake, which had lasting negative effects (School Resource Officers: Benefits and Challenges). With the passing in the Kentucky legislators' of SB1, the working relationships between these two key players must be assessed in order to ensure the safety

and success of all partners involved. The following research questions were created to carry out this study:

1. To what extent do school administrators and SROs understand the roles and responsibilities of their counterparts?

2. Have school resource officers in Kentucky been effectively trained according to National Association of School Resource Officers' (NASRO) TRIAD Model to perform their job duties?

3. Have school administrators in Kentucky been effectively trained on how to partner with SROs to create a safe school environment?

Research design

This quasi-experimental research sampled a combined sixty-nine SROs and school administrators using a closed-form survey related to school safety. The research examined training, partnerships, and the understanding of roles and responsibilities of each group. Data was collected over a three-month period using a Likert Scale to measure responses. The null hypothesis stated, "There is no significant difference between the knowledge of SROs and school administrators related to each other's roles and responsibilities."

This study included the following categorization of participants as illustrated in Tables 4.1 and 4.2 including demographic information. The highest percentage of administrator participants, as noted in Table 4.1, were white males from Western Kentucky between the ages of 41-50 with less than 5 years of administrative experience.

Table 4.1
Administrator Demographics

Age (N)		Gender (N)		Region (N)		Work Experience (N)		Ethnicity (N)	
20-30	0	Male	19	Western KY	24	0-5 Years	12	Asian	1
31-40	9	Female	13	Central KY	4	6-10 Years	5	African American	2
41-50	20			Eastern KY	3	11-15 Years	2	White	29
51+	3			Bluegrass	1	16-20 Years	4		
						21+ Years	9		

The highest percentage of SRO participants, Table 4.2, were white males from Western Kentucky between the ages of 50-59 with less than 5 years of experience in their most recent role.

Table 4.2
School Resource Officer Demographics

| Age (N)		Gender (N)		Region (N)		Work Experience (N)		Ethnicity (N)	
20-29	1	*Male*	*36*	*Western KY*	*19*	0-5 Years	15	Hispanic/Latino	1
30-39	3	Female	1	Central KY	11	6-10 Years	3	African American	3
40-49	10			Eastern KY	1	11-15 Years	6	White	33
50-59	20			Bluegrass	2	16-20 Years	5		
60+	3			Northern	2	21+ Years	8		

Findings
Descriptive statistics were calculated for responses, and results are shown in Table 4.3. Upon calculation of the survey statistics, the mean level of agreement with the survey statements for SROs (24.19) was lower than those of the administrators (26.88) surveyed. As a group, administrators (3.696) were more in agreement with others in the group than the SROs (4.068). For SROs, the range of responses was 23 points, while the range for administrators' was 13.

Table 4.3
Descriptive Statistics

|	N	Minimum	Maximum	Mean	Std. Deviation
Administrators	32	19	32	26.88	3.696
SROs	37	8	31	24.19	4.068
Valid N (listwise)	32				

The Histogram in Figure 4.1 shows the distribution of survey responses for SROs. The presence of a potential outlier respondent with an agreement for the statements below the lower bound was noted in this survey. Since this was a quasi-survey and the outlier is representative of the opinion of an SRO, the data was not removed.

Figure 4.1

Histogram of SRO Responses

Figure 4.1 — *Histogram of SRO Responses*
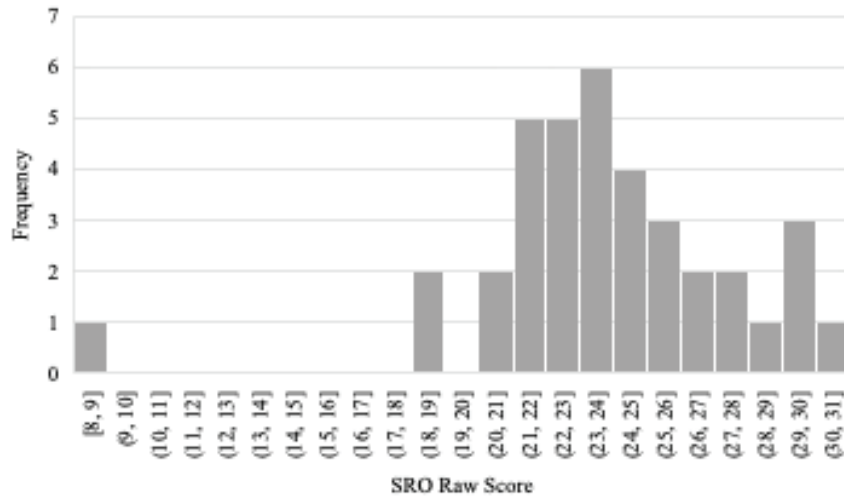
The Histogram in Figure 4.2 shows the distribution of survey responses from administrators. This Histogram of responses for SROs in Figure 4.1 more closely represents a normal bell curve than those for administrators.

Figure 4.2

Histogram of Administrator Responses

Figure 4.2 — *Histogram of Administrator Responses*
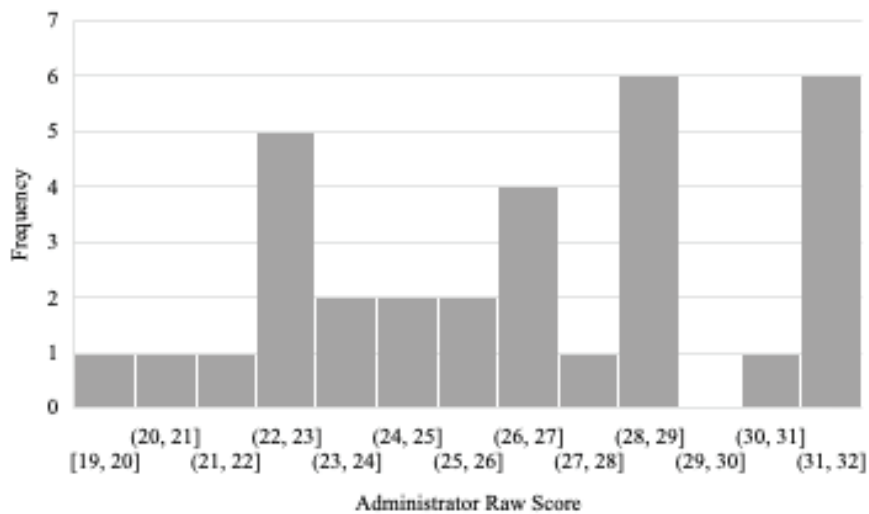
A two-tailed test for independent means was conducted on administrator and SRO survey responses using SPSS, Version 24.0. Table 4.4 displays the results.

Table 4.4

Two-tailed t-Test for Independent Means

		Levene's Test for Equality of Variances				
		F	Sig.	t	df	Sig. (2-tailed)
Admin/SRO	Equal variances assumed	.275	.601	2.853	67	.006
	Equal variances not assumed			2.873	66.822	.005

A *t* coefficient of 2.853 (df = 67) was significant at the level p = 0.006, the critical value of *t* being 1.996. Because the calculated value of *t* = 2.853 was larger than the critical value of *t* = 1.996, it was concluded that there was a significant difference between the administrator and SRO responses. Therefore, the null hypothesis, which stated that there would be no difference in the knowledge of the respondents concerning each other's' responsibilities, was rejected.

Based on the rejection of the null hypothesis, there was a difference in knowledge for SROs and school administrators. In this case, the administrators surveyed were, on average, more knowledgeable and had a lower standard deviation among respondents. The SROs were less knowledgeable on average and more volatile. With respect to this information, it was possible that variability among training for SROs between districts was greater.

Table 4.5 provides the average response value for each question on the administrator survey. The question, "I feel SROs are necessary parts of the

school community," received the highest value (3.91). The lowest value (1.97) was in response to the question, "The SRO with whom I work is responsible for administering school discipline."

Table 4.5

Administrator Response Values

Question	Average Response Value
I have received adequate and effective training to prepare me to work with a school resource officer (SRO).	3.25
The SRO with whom I work has been effectively trained to work with me in my role as a school administrator.	3.56
The SRO with whom I work clearly understands the expectations for his/her day-to-day job duties within my school.	3.44
The SRO with whom I work has a good understanding of my role and responsibilities as a school administrator.	3.56
I have a good understanding of the roles and responsibilities of a SRO.	3.44
The SRO with whom I work clearly understands who his/her director supervisor is.	3.66
The SRO with whom I work is responsible for administering school discipline.	1.97
I feel SROs are necessary parts of the school community.	3.91
The frequency with which the SRO and I partner together to educate the school community e.g., classroom guidance lessons, organize parent involvement nights, etc.) would best be described as. . .	2.84
The frequency with which I refer students to the SRO for informal counseling opportunities or mentoring would best be described as. . .	3.09

Table 4.6 provides the average response value for each question on the SRO survey. The question, "I feel SROs are necessary parts of the school community," received the highest value (3.70). The lowest value (1.46) was in response to the question, "As an SRO, I am responsible for administering school discipline."

Table 4.6

SRO Average Response Values

Question	Average Response Value
The training I received to become a school resource officer (SRO) effectively prepared me to perform my job.	3.14
I clearly understand the day-to-day expectations and job duties for which I am responsible as a SRO	3.24
The school administrator with whom I work understand my role and function as a SRO	3.06
As a SRO, I clearly understand who my direct supervisor is	3.41
As a SRO, I am responsible for administering school discipline	1.46
I feel SROs are necessary parts of the school community	3.70
The frequency with which the school counselor and I partner together to educate the school	2.76
The frequency with which I receive referrals from the counselors to informally counsel or mentor	2.70

As evidenced from the study, both subjects responded the same with the highest and lowest average response values, thus, leading the researcher to compare the second highest and lowest responses. Table 4.6 provided the average response value for each question on the SRO survey. The question, "As an SRO, I clearly understand who my direct supervisor is," received the second highest value (3.41). Interestingly, in Table 4.5 this was the same response for the administrators (3.66) as well, "The SRO with whom I work clearly understands who his/her direct supervisor is."

The second lowest score from the administrator study was (2.84), "The frequency with which the SRO and I partner together to educate the school community e.g., classroom guidance lessons, organize parent involvement nights, etc.) would best be described as…" This compared to the second lowest score reflected from the SRO study (2.70) which stated, "The frequency with which I receive referrals from the counselors to informally counsel or mentor."

Further analysis included box and whisker plots, Figures 4.3 and 4.4, used to display the spread of responses for the percentage of time spent in each role. These charts provide an overall visual of the pattern of responses for both

groups. The question on the SRO survey is based on NASRO's Triad Model which encourages SRO job performance to be based on three main functions: Law Enforcement Officer, Educator/Teacher, and Informal Counselor. The question stated, "Using these three boxes below, assign a percentage value to the amount of time you spend each day engaged in these three functions" with all three boxes equaling 100 percent.

In Figure 4.3 the administrators' responses for the percentage of time the SRO spent in their school on their specific roles is displayed. The survey question was modified to ask, "Think about the day-to-day role and function of the SRO(s) in your building(s). Based on your observations and using the three boxes below, assign a percentage value to the amount of time you see the SRO engaged in these three functions each day." School administrators responded that SROs spent an average of 36% performing law enforcement responsibilities, 19% in the educator role, and 44% in the counselor/informal mentor role.

Figure 4.3

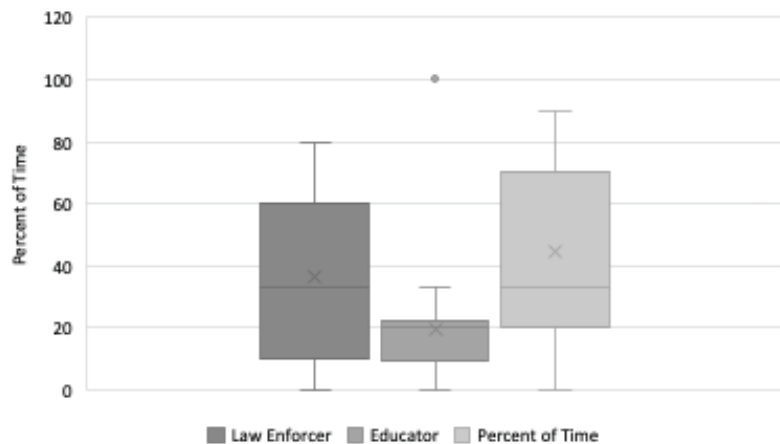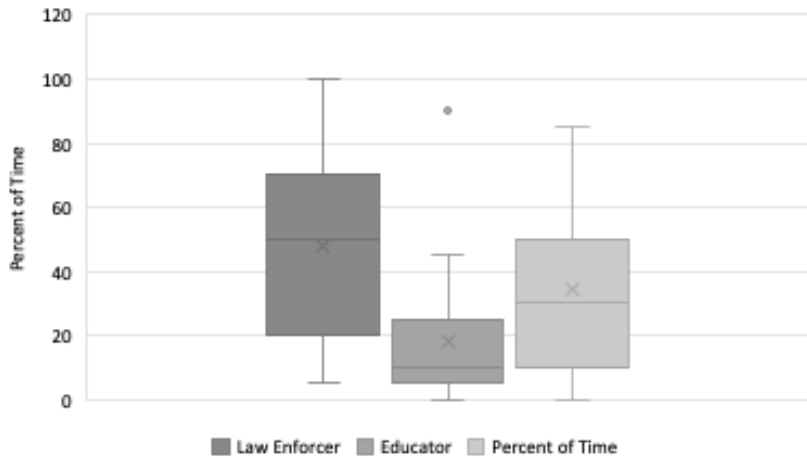*Administrator Average Response Values*

Figure 4.4 indicates the SROs spent an average of 48% performing law enforcement responsibilities, 18% serving as an educator, and 34% in the counselor/informal mentor role.

Figure 4.4

SRO Average Response Values

In summary, based on the findings in this study, the null hypothesis was rejected. The data indicated that there was a significant difference between the knowledge of SROs and school administrators related to each other's roles and responsibilities.

Conclusion

The above research strongly suggested the School Resource Officers are greatly needed in our schools. Unfortunately, the roles of these officers are often unclear, creating possible ineffectiveness. This study sought to address this situation. Over the span of three months, a convenience sample of thirty-two K-12 school administrators and thirty-seven SROs from across the state of Kentucky were surveyed using the instrument created by project researchers. These surveys examined how two groups of people with school safety concerns and responsibilities, SRO members and school administrators understood the role of SROs. Respondents were surveyed in three settings: a state conference for SROs, a state conference for school administrators, and an administrator meeting in a Western Kentucky school district. The research study determined there was a difference in a difference in understanding between the two groups, thus clearly suggesting the essential need for an immediate implementation of professional learning for all team members.

References

Bardick, A., & Bernes, K. (2008). A framework for assessing violent behaviors in elementary school-age children. *Children & Schools*, 550.

Barrier, C. (2019, Fall). School safety: Three eys for your school. *Kentucky School Leader*, pp. 12-13.

Crawford, C., & Burns, R. (2015). Preventing school violence: Assessing armed guardians, school policy, and context. *Policing: An International Journal of Police Strategies and Management*, 631-647.

Federal Bureau of Investigations. (2019). *Echoes of Columbine*. Retrieved from FBI: fbi.gov/video-repository/echoes-of-columbine-2019a.mp4/view

Federal Commission on School Safety. (2018). *Final report of the Federal Commssion on School Safety*. Washington.

Gavin, M. L. (2018, February). *Should you worry about school violence?* Retrieved from Teens Health: kidshealth.org

Hoppe, S. (2019, May 2). *The top qualities to look for when hiring a School Resource Officer*. Retrieved from RAVE Mobile Safety: ravemobilesafety.com

Larson, J., & Mark, S. (2014). Best practices in school violence prevention. *Best Practices in School Psychology*, 231-242.

National Association of School Psychologists. (2015). *Responding to school violence: Tips for administrators*. Retrieved from NASP: nasponline.org

National Association of School Resource Officers. (2012). To protect and educate: *The school Resource Officer and the prevention of violence in schools*. Hoover: NASRO. Retrieved from nasro.org

Rosiak, J. (2014). School Resource Officers: Benefits and challenges. *Forum on Public Policy: A Journal of the Oxford Round Table*.

Thomas, B., Towvim, J., Rosiak, J., & Anderson, K. (2013, September). School Resource Officers: Steps to effective school-based law enforcement. *National Center Brief*, pp. 1-23.

U.S. Department of Education. (2007). Public school practices for violence prevention and reduction: 2003-04. *Issue Brief*, 1-3.

Volungis, A. M., & Goodman, K. (2017). School violence prevention: Teachers establishing relationships with students using counseling strategies. *SAGE Journals*.

Mississippi School Bus Safety
from Wagons to Nathan's Law

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Abstract

A historical investigation of the origins of Mississippi public school transportation was examined through the viewpoint of safety. Early Mississippi laws are identified and changes to these laws through the 20th century were studied. Current accidents involving students on public school transportation in Mississippi were examined in relationship to the laws. The origins of Nathan's law were discussed and detailed in the paper.

Introduction

On a cold 2009 December afternoon in Jones County, Mississippi, a kindergartener named Nathan Key sat on a school bus headed for home. He rode the bus, as he had done the previous four months, with his two older siblings. It was a routine day in his life, and he rode the bus along with the rest of the kids, excited about the upcoming winter holiday. The school bus came to a stop and let off his neighbor. Nathan knew the next stop, less than 100 feet down the road, would be his stop, and he was suddenly anxious to finally be home. As he prepared his belongings to depart the bus, unbeknownst to Nathan, behind the school bus sat an impatient driver in a red Pathfinder (Dominic Gebben vs State of Mississippi, 2012). The events that would happen in the next horrific moments would forever leave a deep scar on the emotions of not only the residents of Jones County, but the entire state of Mississippi.

To understand Nathan Key's impact on school busing in Mississippi, a brief history of public transportation of school children in Mississippi must first be examined. Many historical events had transpired that led the students on Nathan's school bus to that fateful moment. However, when it came to the protection of the children on that school bus, one glaring mistake had been made by generations of state lawmakers. That mistake would become apparent weeks after the accident when the county district attorney realized, according

to state law, when a driver illegally passed a school bus and thus endangered the lives of school children, he was technically guilty of a misdemeanor and a fine of only $200. On that cold December afternoon as a police officer looked at the small black boots of 5 year old Nathan and heard the screams of a child's mother, he was unaware that this would mark the moment the state would take a long hard look at laws that protected their school aged children and finally declare that the laws were not strong enough to fit the crime.

Birth of Public Transportation

The nation's first law dealing with public transportation of students was passed in 1869 in Massachusetts (Reeder, 1939). While other states experimented with and developed primitive bussing of students, initially through horse and wagon, Mississippi lagged. By the turn of the century, Mississippi's educational system consisted of one room school buildings scattered across the state. Each county had a local superintendent who attempted to run the scattered assortment of school buildings. As the new century emerged, a handful of these leaders began to have discussions concerning matters related to how local students could be transported to centralized schools. The term "consolidation" emerged in discussions among superintendents. The term became confusing because it ultimately developed into two disparate meanings. The first was to eliminate the one room schoolhouses by closing them and creating multi-grades schools. Of course, in order to accomplish this task, students had to be transported from their homes to the new schools. As a result, the term was used so much it became associated with both transportation and building larger schools. Finally, the newly strengthened and reorganized state agency, the Mississippi State Department of Education (1913), clarified the term by defining it as,

> A consolidated school is one composed of two or more former schools combined into one. In this state (Mississippi) only those so formed in which transportation (covered wagons) at public expense is furnished are classified as consolidated. (p. 10)

The cries for consolidation continued, and by 1907, the State Department of Education outlined the results of a study concerning the topic of consolidation at its annual meeting. The findings painted a bleak picture of school enrollment without consolidation. The study found schools where actual attendance would not exceed five or six pupils. In some areas, many of these sparsely attended schools were only located three miles apart. The strongest and most

appealing argument for consolidation was financial. The report rationalized, "The consolidation of two schools dispenses with the services of one teacher and then the cost is reduced by fifty percent. The remaining fifty percent is applied to two schools when united under one teacher have the advantage of stimulus without additional cost." State Department officials, armed with the report's findings, began to lobby Mississippi Legislators. The Mississippi legislature listened to the local superintendents and quickly took up the topic of transportation. With very little debate, they passed the first law discussing the topic. This law was signed by Governor Noel on March 9, 1910 and stated,

> Be it enacted by the legislature of the state of Mississippi, that where two or more schools are consolidated into one school by the county school board, the board of trustees for said school, together with the county superintendent are authorized and empowered to provide means of transportation for pupils. (Mississippi, Law 1910, c. 124, sec. 1.)

As the law was written, the legislature made what would later prove to be a significant mistake. The 1910 provision stated transportation was authorized when two or more schools were consolidated. However, they did not set a distance for required transportation. This error was corrected at the next session in 1912 when they amended the law to read,

> That where two or more schools are consolidated into one school by the county school board, the board of public school trustees for said consolidated school, together with the county superintendent, are authorized and empowered to provide means for the transportation of pupils living two miles from the consolidated school to and from the school house in the district. (Mississippi, Law 1912, c. 255, sec 1.)

With the two-mile rule in place, the legislature made one more critical addition to encourage consolidation in the form of a revision of the tax code. With one additional paragraph they allowed for an "annual tax levy on the property of a school district sufficient to pay for transportation wagons and other incidental expenses." (Mississippi Law 1912, c. 255, sec, 3.) This allowed for public funding of transportation, and the counties immediately began taxing for transportation.

From Wagons to Buses

Prior to the 1912 revisions some counties were so eager to consolidate they used their own funding. Harrison County became the first to transport by utilizing seven wagons during the 1910-11 school year to transport 65 children (Mississippi, 1923). By the 1911-12 school year, school transportation had caught on across the state. Once funding through the 1912 legislation had been guaranteed through local taxes, forty eight of the eighty counties in the state were transporting students (Guyton, 1952). By 1921, every county in Mississippi apart from Issaquena was transporting students via wagon. This brought the total to over 35,000 pupils statewide that were utilizing public transportation to and from their local school.

Every school began with a traditional horse drawn wagon, and the efforts to regulate them for safety fell on the local county superintendents. Historically, little is known concerning the types of wagons that were utilized statewide between 1910 and 1922 (Middleton, 1959). It wasn't until 1922 that the State Board of Education formally adopted rules and regulations pertaining to school transportation (Mississippi, 1923). The state regulated that the wagons be "comfortable and ample" and that the teams (horses) be sufficient to carry the weight of the students. The state hesitated to mandate the wagons used for transporting students be owned by the school districts but did recommend the practice in order to guarantee "the wagons are the right kind" (p.10). All wagons were to be covered with waterproof covering with the walls being practically straight to guarantee a comfortable ride. Seats on both sides of the body running lengthwise with comfortable backs and steps in the rear with curtains for both ends were recommended. The bodies were required to be sufficiently strengthened by iron bars and braces. The discussion of the iron was the first mention of any type of safety features for the transportation of students (Mississippi, 1915). Another more important change was occurring regarding the type of transportation vehicle used between 1917 and 1920 as several counties shifted from wagons to motor drawn vehicles. It is unknown which county in Mississippi was the first to use gas powered vehicles. However, what is known is by 1923 more than half of all counties had switched from wagons to primarily Ford trucks (Mississippi, 1923). There is no historical date of when the last wagon was replaced by the mechanical bus, but by the end of the 1920's, the Ford school bus was the king of the road when it came to the transportation of school aged children.

Laws of 1938

Mississippi prior to 1938 was a series of hodgepodge local laws which saw various city and county lines as the determining boundary for law and order. Bootleggers and general law breakers were known to run from the law down the winding backroads in an effort to cross arbitrary lines and thus force local law enforcement to call off the chase. The state of Mississippi saw a need to create, define, and fund a state highway system in order to clarify these emerging legal issues. In 1938, the state passed a series of laws coded chapter 200 which founded the Mississippi highway system as well as a policing force known as the Highway Patrol. Within the chapter 200 law was an additional section which dealt with the passing of school buses while loading and unloading students.

Labeled in the 1938 driving code as Section 1484 sub section 101 was a brief section titled "Overtaking and passing school bus." The statute stated,

> *The driver of a vehicle upon a highway outside of a business or residence district upon meeting or overtaking any school bus which has stopped on the highway for the purpose of receiving or discharging any school children shall drive at a speed which is reasonable and prudent and with due caution for the safety of any such children and in no event in excess of ten miles per hour in passing such school bus.*

The law as it is written was a first time the state had addressed the need for bus safety as it pertained to other drivers. Buses were already being constructed and produced nationally with bright colors and flags. The law, far from the safety laws of today, did recognize the need for safe driving around school buses. However, allowing people to pass loading and unloading buses without penalty of law would only last for 8 years.

The definition of a school bus was also made during the 1938 laws. A school bus was defined as "every motor vehicle owned by a public or governmental agency and operated for the transportation of children to or from school or privately owned and operated for compensation for the transportation of children to or from school." This open-ended definition allowed for local schools to have their own types of buses and did not regulate the modern signage. There is no historical date of when the wagon was completely

replaced by the mechanical bus, but the 1938 definition marked the absolute end of the school wagon.

Rise of Steel

By 1943, Mississippi had over 2,237 farm trucks with homemade wooden bodies being used to transport children to school (Middleton, 1959). In some instances, they were also used in transporting farm produce, cattle, hogs, and fertilizer. Mississippi had twice as many school buses with home-made bodies in operation as all other southern states combined. There were only 637 steel bodied buses out of a total of 3,952 vehicles in use transporting children to school (Mississippi, 1970, p.49). Also, at this time, cost became a major issue in the debate for school buses. With local counties independently contracting private citizens to transport their children, the price was increasing. In 1944, the state legislature passed a law that authorized county schools to purchase and operate transportation equipment. With the ability of the counties to take out loans to purchase new buses, a buying spree took place in the state. Unfortunately, the country was in the middle of World War II, and rationing was occurring. The Federal government granted the state of Mississippi a steel shortage waiver to purchase 937 steel bodied buses. This was the first major movement in the state to create safer steel bodied buses for all students. By 1953, ninety percent of students statewide were being transported in steel bodied buses (Middleton, 1959).

Bus Driver Training and the 1946 Law

In 1946, the Mississippi state legislature reorganized the State Department of Education. They also gave the power of regulating school transportation to the state agency. Because transportation of students had now become a state responsibility, the state also amended the safety laws concerning passing of school buses. In 1946, with more and more school buses on the highways, the state mandated that all drivers, "shall come to a complete stop and shall not proceed until the children have crossed the street or highway and the school bus has proceeded in the direction it was going." This new law ended the passing of school buses while unloading and loading (Mississippi, 1943).

With the increase on school roads of steel bodied buses which included fire extinguishers, first aid kits, flags, flares, and safety exit doors; the one item that still needed to be addressed was driver training. In 1945, the State Board of Education adopted a training course for bus drivers. The first class saw

the training of 33 county representatives and 6 highway patrol officers. These individuals, all men, were designated and authorized to return to their local counties and conduct their own training for all bus drivers employed in their counties (Mississippi, 1953, p. 53). The school that was developed for this purpose has continued to be a success and has since expanded to include training mechanics on how to work on the buses.

1974 and 1986 Changes

After the state takeover of transportation of students, the system continued to operate with no major changes over the next 50 years. There were changes to the bus curriculum and the annual budgets, but for the most part, there were no major shifts in transportation policy. In 1972, the state legislature, once again codified their laws as they had done in 1936. Two years later in 1974 with the highway system firmly established for 38 years, they rewrote the code protecting buses from being passed. The old law which stated "outside of a business or residence district" was considered confusing and replaced with "upon a street or highway." This aligned the terminology with the two types of roads in Mississippi, highways and city streets. The one glaring omission from the law was the continued absence of any statute for punishment of law breakers. This was remedied in 1986 when it was decided after 48 years of existence that the law needed a monetary punishment. With the addition of a section 2 under the statute, illegal passing of a school bus was classified as a misdemeanor with a fine ranging from $200 to $500 and/or imprisonment for more than one year. A very small amount when compared to the gravity of endangering a child (Mississippi & Lexis Publishing, 2019). However, regarding the law, a punishment was finally in place.

Tragic Event in Jones County

Three months away from the 100-year anniversary of Mississippi's first law authorizing the public transportation of students, five-year-old Nathan Key and his two siblings prepared to get off at the next stop on his school bus. Over the almost century, the state had plenty of time to prepare safe school buses, properly train their drivers, and create much needed laws to prosecute any person from passing a stopped school bus. However, the actions of an impatient 23-year-old male driver named Dominic Gebben would expose the flaws in the law (Gebben v. State of Mississippi, 2010).

Gebben was driving a red Pathfinder. As he followed the school bus, he stopped when it deployed its stop sign at the house prior to Nathan Key's. The bus driver then switched off the stop sign and proceeded east towards Nathan's driveway. The bus driver turned on his yellow caution lights to signal a stop was upcoming. As the bus came to a stop, the bus driver allowed a west bound car to pass by and then the bus driver once again deployed the stop sign. Gebben, positioned directly behind the bus in his red Nissan Pathfinder, came to a complete stop. With the stop sign deployed and all cars behind the bus stopped, the driver opened the door and allowed the three Key children to depart. Leading the trio, Lewis Key, Nathan's older brother at the age of 11 walked in front of the bus and safely crossed the street. Nathan followed behind, but as he attempted to cross the street, Gebben's swung his Pathfinder onto the wrong side of the road to pass the bus. His Pathfinder, picking up speed, struck Nathan knocking him down and remaining directly in his path. Instead of stopping, Gebben accelerated and ran over Nathan. Several cars behind the bus and unaware of the unfolding horror was Nathan's mother who was returning home. She saw the Pathfinder drive around the bus and then as she got out of her car, she saw her two children kneeling at the edge of the road. As she ran to the scene, the first thing she saw was a little pair of black boots that she knew were Nathan's. As she knelt by her five-year old son's badly injured body, she cradled him and awaited an ambulance (2010).

Tony Shaw, who was two cars behind Gebben, immediately pursued the fleeing red Pathfinder. Gebben sped toward an intersection and turned right onto another road. Shaw continued the pursuit, determined to record the license plate number. Gebben quickly pulled into a driveway then immediately backed out and drove back towards the intersection. Shaw, who was now driving directly towards the oncoming Gebben, honked his horn and pointed for him to stop. Gebben looked him straight in the face and then gunned the Pathfinder again. Shaw, quickly made a U-turn and continued the pursuit. Gebben turned onto a dead end road and then drove through a field and into the woods. He finally was forced to abandon his Pathfinder in the woods, approximately 300 yards from the paved road. Shaw parked his car and awaited law enforcement arrival.   Shortly there-after, Jones County Deputy Jerry Hutcheson arrived on the scene and discovered Gebben running from the woods toward a nearby mobile home. Gebben was taken into custody and made the declaration, "My brakes went out, but how's the kid?" Over the next several hours, after

receiving his Miranda rights, Gebben finally confessed to the detectives. He admitted that he had come to a stop behind the school bus; however, as he waited, he became agitated and chose to drive around the bus. The actions of the Pathfinder were recorded on a small camera inside the school bus. Mississippi, years prior, had allowed video recorders to be placed inside buses to help monitor students' behaviors. The camera, pointed from the driver to the rear, captured the red Pathfinder coming to a complete stop; the front tires then turned to the left in order to pass the school bus. Unfortunately, after arriving at a local hospital, Nathan Key was pronounced dead from his injuries (2010).

Drafting of Nathan's Law

As the Key family mourned the loss of Nathan and made the decision to prosecute the driver of the red Pathfinder, Dominic Gebben, it quickly became apparent there was an issue with the law. Legally speaking, Mississippi has degrees of crimes dealing with loss of life. The most severe, murder, is divided into two categories, murder and capital. Murder is defined as premeditated killing of another person or unborn child. Under this definition, the prosecutors in Nathan Key's case would have difficulty proving premeditation. Therefore, the lesser murder crime of manslaughter would need to be applied to the events. However, the state would need to prove culpable negligence which means recklessly acting without reasonable caution, but with Gebben arguing his brakes failed, this would be difficult. The other major issue was that under state statute, manslaughter was only punishable by 1 to 20 years in prison, which was less than the public outcry demanded. The biggest advantage for the prosecution was that Gebben fled the scene. This action showed a reckless disregard for human life and added a felony fleeing charge which could result in an additional 5 years. Another glaring issue with the law was that to apply a strong punishment to anyone harming a child by passing a school bus required the death of the child. This was due to Mississippi's aggravated assault statute which dealt with crimes less than the loss of life and did not include the illegal passing of a school bus (Mississippi & Lexis Publishing, 2019).

 To address the public outcry, State Senator Chris McDaniel drafted a bill for the 2010 legislature, one year after these horrible events. The bill proposed a felony provision for offenders who passed stopped school buses and in doing so harmed children. The bill proposed a 15-foot buffer zone around school buses, making it illegal for bus drivers to talk on their cell phones while driving

and ordered the creation of school bus safety classes for students. The bill quickly passed the Mississippi Senate; however, when it entered the House of Representatives, it faced severe opposition. The House Judiciary committee made changes that required a conference between both houses. The critical sticking point was the issue of a felony for the act of passing a school bus and harming a child. Some members felt adding another felony under this provision would add more crimes to the Mississippi statute. Another revision was introduced that angered Senator McDaniel. The house wanted to reduce the fine for passing a school bus from a minimum of $200 to $1. McDaniel felt this weakened the law. The final breaking point was that the House also wanted to delete the felony provision and by doing so, referred all harming of school children by someone illegally passing a school bus directly to the Mississippi Aggravated Assault section. This angered Senator McDaniel because district attorneys across the state had communicated to him that the aggravated assault section, as written, could not be used against someone who passed a school bus and hit a child. With the two houses at an impasse, the bill died for the 2010 session (Watson, 2011).

McDaniel Tries Again

Armed with the stinging defeat of the 2010 session, Senator Chris McDaniel was determined to continue the fight for what was being referred to as Nathan's Law. Determined not to fail again, he rewrote the bill with a major addition. He not only rewrote the section concerning passing a school bus, he also rewrote the aggravated assault definition within the state statute to include, "the causing of injury to a child who is in the process of boarding or exiting a school bus." This new terminology brought great power to the protection of children exiting and entering a school bus. No longer would the death of a child be necessary for a strong punishment. Nathan's Law also authorized schools to place cameras on the stop signs of each school bus (Mississippi & Lexis Publishing, 2019). With the new bill satisfying all parties involved, the bill quickly passed both houses. The law was signed by the governor and took effect on July 1, 2011 (Nathan's Legacy, 2018).

Nathan's Law saw its first conviction in December of 2011. A Memphis resident in Northwest Mississippi near the Tennessee state line passed a stopped school bus in Olive Branch, Mississippi. Under the old law, the driver would have faced a fine which ranged from $200 to $500 (Clark, 2011). Under

Nathan's law he faced $350 to $1500, depending on the discretion of the local municipal judge. After a brief trial, he was convicted and ordered to pay $523. Since this first conviction, multiple tickets have been issued for the illegal passing of school buses.

Nathan's law has seen two revisions since its creation in 2011. In 2016, the legislature amended the law in order to clarify separated 4 lane traffic. In the revision it was stated when the road is divided and two or more lanes are traveling in one direction, cars do not have to stop on the opposite side of the divider. This eliminated traffic from stopping on the other side of the road on a busy bypass. The biggest change to Nathan's law came in 2019 with the addition of three words. Under the 2011 law, a police officer or school bus driver had to witness and testify that they saw a person passing the school bus illegally. In 2019 the words "any person witness" was added to the statute which thus granted the ability for any witness to make a criminal complaint against a driver who illegally passed a stopped school bus (Mississippi & Lexis Publishing, 2019). This change was initiated by Mississippi Representative Henry Zuber III after a person passed a school bus in his district, but the local law enforcement was unable to prosecute because the bus driver did not get a good look at the driver and vehicle (Personal communication via telephone, September 23, 2019). Fortunately, a local citizen did witness the crime, but because the bus driver failed to identify the vehicle, the 2011 law had tied the hands of the local police. This change did not come without opposition. Mississippi Representative Borngar and a handful of members of the Mississippi Legislature were concerned this would create many false claims (personal communication via email, September 25, 2019). Even with this opposition, the law was passed and the verbiage was added to Nathan's law.

Nathan's Law Fails One Family

On October 4, 2016 in rural Northeast Mississippi, 7-year-old Amiya Braxton had just stepped off a school bus to return home. As she was standing in her driveway, a SUV driven by a person later identified as Karen Carpenter crashed into her and killed her. In an accident reconstruction analysis, it was proven Carpenter was following the bus, and as the bus came to a stop, she swerved to the right and into a ditch directly at the seven-year-old girl standing at her mailbox. Investigators found no evidence Carpenter was texting, a violation of Mississippi law. She also willingly gave blood samples which toxicology reports later determined contained no alcohol or drugs. The biggest issue for

the district attorney was there was no intent that the driver went around the bus in order to pass and because of this could not prove negligence. Carpenter claimed her car malfunctioned, and she could not stop. In two separate grand juries, an indictment was never reached. The district attorney attempted to apply Nathan's law to the incident. However, under Mississippi's aggravated assault statute, there must be willful causing of serious bodily injury. The district attorney stated it was difficult to prove willful cause when the driver went around the right side of the stopped bus without knowing a child was standing at the exit. The family of Amiya Braxton then demanded that the local law enforcement at least charge Carpenter with a misdemeanor as outlined in Nathan's Law (Carlisle & Butcher, 2018). Due to the fact this was prior to the 2019 law change, the sheriff's department could not file because they did not witness the incident. In another blow to the case, the school district had chosen not to install cameras on the stop signs of all their buses, which sadly included the bus Amiya was riding. The absence of a camera was because Nathan's law had authorized but not mandated the purchasing of cameras.

Another Tragedy and Nathan's Law Applied

On Halloween 2018 in rural Northeast Mississippi, an 8-year-old boy was boarding the school bus when 22-year-old Hunter Newman, driving at a high rate of speed, passed a stopped school bus striking the 8-year-old student. Due to Nathan's Law, the Mississippi Highway Patrol immediately arrested the driver on an aggravated assault charge for causing injury. Later that night when the young boy passed away at a hospital in Memphis, the charges were upgraded to manslaughter. He is awaiting trial (Moore, 2018).

The impact of Nathan's law has allowed local district attorneys to charge persons who harm transported students with aggravated assault. It has also allowed local municipal judges to set harder financial penalties for persons convicted of misdemeanors when passing any school bus. However, the law can only go so far. Phone calls made by one of the authors to several county clerks that deal with tickets reveal they do occasionally see tickets issued for illegal passing of school buses. Apparently, the era of wagons and unsafe transport conditions has passed in Mississippi, but incidents of illegal passing continue. Under a national survey by the National Association of State Directors of Pupil Transportation Services in 2018, 755 Mississippi school bus drivers on a single day in May reported 125 illegal passes witnessed during their day's activities (NASDPTS, 2018). This calculates to each child on a bus

experiencing an 8% chance of an illegal pass—possibly resulting in bodily harm-every time they get on and off the bus.

References

Carlisle, Z., & Butcher, R. (2018, January 8). Second grand jury declines to indict driver in death of 7-year-old Amiya Braxton. Retrieved October 15, 2019, from https://www.wtva.com/content/news/Second-grand-jury-declines-to-indict-driver-in-death-of-7-year-old-Amiya-Braxton--468325703.html

Clark, J. B. (2011, December 1). Nathan's Law gets first conviction. Retrieved November 11, 2019, from http://www.desototimes.com/news/nathan-s-law-gets-first-conviction/article_ad633b65-35cd- 50c8-ba4e-885ece8f28fc.htmlpaper

Dominic Gebben v. State of Mississippi, 2010 KA 01593 (Mississippi Court of Appeals 2012)

Guyton, P. V. (1952). *Our Mississippi*. Austin, Tx: Steck Co.

Middleton, W. E. (1959). *The history and development of public school pupil transportation In Mississippi* (Order No. 5905658). Available from ProQuest Dissertations & Theses Global. (301895022). Retrieved from https://login.proxy.library.msstate.edu/login?url=https://search.proquest.com/docview/301895022?accountid=34815

Mississippi. (1915). *Bulletin*. Jackson: The Department of Education.

Mississippi. (1923). *Bulletin*. Jackson: The Department of Education.

Mississippi. (1923). *Biennial report and recommendations of the state superintendent of public education to the legislature of Mississippi for the scholastic years 1921-22 and 1922-23*. Jackson, MS: State Superintendent of Public Education.

Mississippi. (1943). *Mississippi code 1942, annotated: Containing permanent public statutes of Mississippi to the end of the legislative session 1956*. Atlanta, Ga: Harrison Co.

Mississippi. (1953). *Biennial report of the state superintendent of public education to the legislature of Mississippi for the years*. Jackson, MS: State Printers.

Mississippi. (1970). *Annual report and recommendations of the state superintendent of public education to the legislature of Mississippi*. Jackson, MS: State Superintendent of Public Education.

Mississippi., & Lexis Publishing. (2019). *Mississippi code 1972, annotated: Adopted as the official code of the state of Mississippi by the 1972 session of the legislature*. Charlottesville, VA: LexisNexis.

Mississippi State Department of Education (1913). *Bulletin No. 17*, Jackson, MS: Jones Printing Co.

Moore, W. (2018, November 29). Baldwyn bus fatality case bound over to grand jury. Retrieved October 15, 2019, from https://www.djournal.com/news/baldwyn-bus-fatality-case-bound-over-to-grand-jury/article_abb04bb4-dd99-5e8b-ab1f-1ec96909db0d.html

Nathan's legacy. (2018, April 13). Retrieved October 10, 2019, from https://www.leader-call.com/news/local/nathan-s-legacy/article_9d87d625-4861-5dff8246-9b306b097f0a.html

National Association of State Directors of Public Transportation Services (2019). National stop arm violation count. Retrieved November 11, 2019 from http://www.nasdpts.org/StopArm/

Reeder, W.G. (1939). *The administration of pupil transportation*. Columbus, OH: The Educators Press.

Watson, D. (2011, February 9). Nathan's law struggling. Retrieved October 10, 2019, from https://www.jacksonfreepress.com/news/2011/feb/09/nathans-law-struggling/.

College Rivals: Athletics, Academics, and the Life of the Mind

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*It was great to be a part of a team that had wanted
to do something very dramatic and wanted to win.
Not every play works, not every situation works, but
you've got to figure it out, and there's always a next
play. And I think all of those things just happen to
stick with you for a lot of your life, and in my case for
my whole life. This essence of trying to build a
culture of excellence that I learned in sports I
very much brought to the business world*
—*Jeffrey Immelt, GE CEO (retired)*

Abstract

*The story of collegiate athletics over the last half century is one of lost
opportunity. Sports can illustrate intellectual, social, and even spiritual meaning,
elevating humanity to its highest potential. Instead, state governments, private
donors, many parents and students, and institutional leaders have abandoned
what it could be. And this is because they have abandoned the telos of higher
education. Disciplines that bring students to higher levels of thought have lost
their consumer appeal. This essay seeks to examine how collegiate sports so
often falls short of what it could be in a liberal arts setting and suggests ways
improvement might occur.*

Introduction

A liberal arts education encourages students to explore the daunting, complex,
and even mysterious world beyond mere surface experience. Collegiate sports
can serve as a model of what it is that such an education seeks to accomplish:
training in the critical and creative skills necessary not only to understand but
also to contribute to reality. What is more, athletics as a model of the liberal arts
illustrates the human capacity for meaningful transcendence. Athletic programs
today, however, offer something entirely different. They have become an essential
item in the mass-consumer complex characteristic of modern American life.

Institutional leaders are compelled to sell their products to consumers by advertising the various commodified amenities that bedazzle a gilded campus. This includes athletics, not academics. According to Annie Adams, faculty member at Morehead State University, athletics has become "the front porch of the university," a major selling point for consumers. "This oft-used metaphor," she continues, "presupposes that athletics are a gateway for academics, not that academic institutions may provide students with opportunities for athletic competition. Either this is an inadvertent misrepresentation of the institution's core mission, or some administrators have consciously chosen to devalue academics for strategic purposes." Prioritizing the "sale" of an institution through athletics has threatened the intellectual mission of higher education, arresting the development of the mind, and severely limiting what collegiate athletics could in fact accomplish.

Athletics and the Grounded Self

The *telos* of the liberal arts provides grounding in what I call "the 3Cs"— critical and creative citizens. It offers the means to unlock the intellectual and social potentials of students for the purposes of understanding the world and contributing to its flourishing. Athletics can serve as a model of such an education. Let me illustrate how this works. First, participation in an organized sport is a critical endeavor. An individual athlete needs to learn the basics of the game in the same way that a person learns the basics of musing or painting. Both the mind and the body need to be conditioned: ideas, individual will, and physical movement need conditioning in order to conform to a particular craft. The athlete learns how to throw, run, kick, punt, shoot, hit, receive, etc. Smaller parts (running and dribbling) join together to make bigger parts (a patterned play). What is more, coaches and players read the plays unique to their sport. They practice such plays and employ them on the field, the court, or the mat. They learn the rules, which then regulate the way they live in the game. They also carefully read the plays of their opponents, highlighting both strengths and weaknesses in order to gain an edge in a game. In short, players, coaches, and even fans immerse themselves cognitively and physically in the logic of the game.

Second, athletic activity cultivates creativity. While studying the success of their own plays and the objective rules of the game in general, athletes develop new creative strategies within the textual construct of their particular sport. The critical and creative come together in the way that athletics encourages a kind of scientific testing as well as argument making. Whether offering a

well-reasoned proposal for how to defeat an opponent or predicting who will win a major regional tournament, athletes observe and draw conclusions from their observations.

Finally, athletic programs mirror the citizenry aspect of the liberal arts. An individual who can read the world correctly, communicate effectively the truths about that world, and find creative ways in whatever setting—whether at work, at home, or in their local communities—to contribute to its success is highly valued. The team that makes the winning touchdown stands out; the team and its players go down in history with great admiration and adulation. An individual who does so likewise shines as someone to praise and emulate. Such individuals have the potential to become leaders in their community or the wider society.

This does not mean that such a person will always receive great praise for an observations or contributions. A liberally trained individual often faces those who may not be interested in contributing to the well-being of humanity. We often forget that a liberal arts education should cultivate a deep empathy—not a cutthroat competitive posture reflective of a capitalist ethos—for the world, a cultivation of principled living. In this way, a critical thinking person can, in fact, be quite dangerous, especially when the critical and creative are employed to expose abuses of power. An athlete—as an athlete—can confront serious injustices in society. Athletes like Jackie Robinson, Muhammad Ali, Jesse Owens, Tommie Smith, John Carlos, and Colin Kaepernick, among others, have powerfully and creatively communicated resistance to the injustices of empire, ultra-fascism, and racism. I suspect that it is the habit of competition and a confidence in their skills that allow such individuals to live principled lives, regardless of the praise or derision received by society.

Athletics and the Transcendent Self

Another part of the "higher" level of learning in a liberal arts context is the opportunity to explore the world beyond the physical. I'm thinking here of the immensely transcendent disciplines within the humanities—all of which compel students to meditate on ultimate questions of being and knowing. (This is not to say that STEM disciplines are not richly transcendent. Explorations in whatever discipline that go higher through paradigm-bending—even shattering— questions can never be divorced, for instance, from a philosophical perspective, which itself needs to be accounted for.) In this way, athletics can serve as a

helpful model for the cultivation of our spirituality, religiosity, or transcendence—anything that we may consider the deepest expression of our humanness.

Athletics mirror religion in a few ways. First, the word religion literally means to read over and over again. Religion consumes an individual's entire life. Athletes train, in season and out: they watch what they eat; commune with their brethren; and maintain a sharp and active mind as they become part of this spectator world. They live and breathe sports. Likewise, as a religion, athletes have their own liturgy: shared vestments, colors, symbols, chants, and ceremonies. Faithful engagement in such liturgical activities transform—creates, in actuality—the participants. Second, along with this liturgy is the kind of rhetorical preaching that coaches or captains give to their teammates. These motivational speeches are saturated with calls to never give up, to endure, to fight and defeat the evil foe for the purposes of achieving moral greatness and historical memory. Such preaching is not done to communicate reason or the logic of a play but to place the players in a greater narrative of worth and value that seems to propel them into eternity.

Adding to the religious aspect, athletics can illustrate quite acutely the human capacity for transcendence. I mean this in two ways. The sense of transcendence comes when parts come together in a meaningful whole. Transcendence is a consequence of dynamic meaning; meaning, in turn, is when we actively put parts together to form a coherent mosaic. When numbers are attached to other numbers, words to other words, sentences to other sentences, arguments with other arguments, we are in pursuit of meaning. When academics draw these isolated parts together for the purpose of achieving coherence, they attain meaning. The word cohere means to "stick with"; meaning can only be achieved when things stick together—and the more complex the coherence, the deeper the meaning. And when we reach a moment of meaning, we feel it. A moment of enlightenment comes when we feel intimately connected—a part of even—with that which was once foreign to us. When we solve a difficult math problem or finally understand the words of a great writer, we feel a sense of relief, the relief that we get when something that was at one point foreign to us is no longer so. The feeling of transcendence is not unidirectional, pointing strictly upwards. Instead, the feeling moves in every direction, making us feel like we've transcended the limitations not only of the mind but of the body. Indeed, this kind of feeling is one in which we feel as if we're a part of the thing that we're studying. As it relates to athletic performance, the "perfect game" is one in which all the parts come together for the player, who becomes part and particle of the game

itself. Watching an athlete make the perfect play is a manifestation of beauty, elevating player and spectator alike. An athlete is often in the zone, "in" the game, and there is a feeling of elevation when an athlete demonstrates such coherence. Furthermore, when a perfect game turns into a victory, players do not hang their head or slump their shoulders because of the unbearable heaviness of winning. On the contrary, the victors jump for joy and reach toward the sky, symptomatic of the human desire to break through—to transcend—their own skin.

Consuming Athletics (and Academics)

Up until the late eighteenth century, participatory athletics fell into three general categories: military training, religious practice, and community festivals. Such competitive activities, according to Tony Collins in Sports in Capitalist Society, were different from modern sports in that they were not "codified, organized on a commercial basis nor seen as separate from everyday life." The rise of professional sports, Collins suggests, coincided with the rise of industrialization in England in the late eighteenth century, producing a fundamental change in three sports: "horse racing, boxing, [and] cricket." Spectators were encouraged to participate in sports not only by watching but analyzing and betting. This quickly became a means to reinforce the habits of market competition, especially in regard to disciplining and pacifying workers: "the binary world of winners and losers [in sports] matched perfectly the cultural dynamic of capitalism." Modern athletics continue to be shaped by at least one layer of cultural capitalism—namely, consumerism (and I mean this more than simply as a conduit for brand advertising). Organized sports have been "captured," writes former University of Michigan President James J. Duderstadt, "by the entertainment industry, commercialized and professionalized to the extreme." Contemporary athletics has been captured by consumerism and is thereby complicit in arresting the development of the mind. "The excessive commercialization of college sports," writes Duderstadt, "threatens the academic priorities of the universities that host these programs."

Corporate Athletics and the Undoing of Self

Proponents of a liberal arts education often tout the importance of wholistic learning, both in terms of strictly cognitive knowledge but also social being. Knowledge depends on meaning; meaning, in turn, is created by intellectual and social coherence. As mentioned above, students (and athletes) arrive at meaning (or meaningful ideas) when parts—numbers, propositions, words, sentences, brush strokes, notes, dance steps, etc.—come together to form larger wholes—essays, books, paintings, musical pieces, arguments,

equations, etc. Meaning congeals into a kind of a workable or dynamic knowledge when the initially fragile coherence sinks deep into our long-term memory, when the parts begin to blend into one another. The greater the mosaic (i.e., the more complex the coherence of parts), the more balanced or harmonious the economy of parts, the deeper and richer the coherence (coherence means "to stick with").

Yet knowledge is fractured under the dictates of capitalism, since capitalism interrupts the process of meaning. The modern mind has been intensified by the contemporary information economy, steeped as it is in social media, exacerbating cognitive incoherence. Society is drowning in a sea of sporadic blips, hashtags, and status updates. Students have plenty of information thanks to tools like Wikipedia, but the skills necessary to piece these bits together have waned considerably, especially when institutions cut programs that are focused on logic (e.g., philosophy), criticism (literature), and creativity (the arts). In the absence of the tools of critical and creative thinking, many of us have foolishly turned a tool (e.g., Google) into a brain that thinks for us. With our colleges become increasingly textbook oriented, assessment obsessed, and trades oriented, objective activities that avoid the ways in which learning requires human embeddedness in the dialectic of study, many schools are quickly losing the skills necessary to construct meaning. There's no time to think about things like human nature, aesthetic value, philosophical dilemmas, or spirituality when capitalism moves at lightning speed, which, in a consumer context, intensifies the demand for immediate profitability.

On a social level, who we are as individuals—the meaning of "self"—is never divorced from social cohesion: family, friends, coworkers, spouses, and cultural communities play a central role in shaping the self. University of Bristol psychologist Bruce Hood articulates this in his book *The Self Illusion: How the Social Brain Creates Reality*. The development of both the mind and the self depends on a plethora of external cohesive factors, Hood argues, and not on some internal Cartesian essence. Sadly, however, the economic world that has come to take dominion over our lives—from the physical discipline created by industrialization to the information age and their corresponding ideologies of classical liberalism to neoliberalism—is not all that interested in preserving community. As Marx and Engels wrote in *The Communist Manifesto*, expanding capitalism, among its many of its economic and social exhaustions, produces "uninterrupted disturbances of all social conditions." Indeed, it seems that

the fracturing of social bonds—of meaningful bonds—has been a mainstay of capitalism since its early days. A capitalist culture thrives on a division of labor, a division of spaces, and competitive identities—all of which are derived from the dynamics of materialism. The social end of capitalism is the creation of alienated and competitive individuals. There is "no other nexus between man and man than naked self-interest."

Community and Corporatized Athletics

The notion that the logic of capitalism seeks to preserve forms of coherence, especially intellectual and communal, is one of its many contradictions. Regardless, many institutional leaders claim that athletics is a means to both strengthen and build community. Leaders often push the benefit of athletics programs since they augment student numbers and strengthen the finances of an institution, causing the overall "community" of a college or university to grow. Athletics can certainly bring more students to a school, but what about the quality of students? And when it comes to finances, only "10% of athletic programs generate positive net income," according to the authors of a Moody's Investors Service report in 2013. And these are only "three of the top conferences." Most athletic programs, in fact, "operate at a loss."

Leaders also argue that athletics is a great way to build "school spirit," a variation of the "building community" argument. In *The Athletic Incubus: How College Sports Undermine College Education*, authors Andrew Hacker and Claudia Dreifus identity as myth the notion that "intercollegiate competition builds school spirit." They found that institutions like Cal Tech, MIT, Grinnell, and Washington University, "where students are pleased with the education they're getting, they feel little need for varsity competition to pump up school spirit." It has always seemed odd to me when corporate-driven schools talk about community, since the culture of their adopted world blatantly abhors such a thing. Capitalism does not sustain community over the long term. Considering the historical modes of capitalism over the last two hundred plus years, one will find that the maintenance of community—of a team—has never been a central ideal. Indeed, maintaining community is one form of resistance against capitalism. The only communal cooperation comes by way of a small yet powerful elite who seek to coordinate their efforts to eliminate the wider competition, a strategy employed by the robber barons of the Gilded Age. Some may respond by pointing out that athletics can teach the value of teamwork, people working together to accomplish a shared task, or that the skills on

the field or on the court can be transferred to the world outside athletics. But building a "team" or a "community" is ultimately undermined within a culture that prioritizes the "cash value" of success. Athletics certainly provide instruction in team-work or care for the community, but only in an ephemeral or penultimate sense. Individuals work against one another in order to get ahead. And the skills transferred to the wider world are restricted to the corporate ethos. (Inspirational "life success" books written by former professional coaches share a striking resemblance to books written by leading CEOs—as well as mega-church, corporate-driven hipster evangelicals.)

Another practice of a corporate-driven culture that undermines community is the implementation of austerity. When the finances of a corporate-run institution are down, the final play—the Hail Mary—that wins the game is to cut programs and full-time faculty and increase the already heavy tuition burden on students. When this is the prime tool to maintain solvency, indicative of institutions beholden to neoliberalism, community is immediately slashed. Students and faculty suffer the most. Indeed, the first "community" to be protected is the administration, with athletics a very close second. Maintaining a weak faculty body through austerity, where over 70% of instruction nation-wide is done by contingency labor, hurts not only the community but also the intellectual culture of an institution. Removing faculty members, often the first on the chopping block, has a negative impact on the life of the mind. (And many academics, including this writer, are getting tired of the utilitarian excuse that austerity is not only a temporary fix but also a benevolent means of preserving an institution and that anyone who criticizes the supposedly self-less actions of administrators is cast as an enemy.) The adjunctification of faculty labor to save money shows the lack of value in seasoned and skilled professionals. Austerity demonstrates what is truly valued by those who hold the unchecked power to implement such measures.

The story of collegiate athletics over the last half century is one of lost opportunity. Sports can illustrate intellectual, social, and even spiritual meaning, elevating humanity to its highest potential. Instead, state governments, private donors, many parents and students, and institutional leaders have abandoned what it could be. And this is because they have abandoned the telos of higher education. Disciplines that bring students to higher levels of thought have lost their consumer appeal. Many have submitted to the hegemony of neoliberal

capitalism and its attending consumer culture. "All that is solid melts into air," Marx and Engels once presciently wrote, "all that is holy is profaned."

References

https://academeblog.org/2017/10/23/changing-the-conversation-regarding-intercollegiate-athletics/

Tony Collins, *Sports in Capitalist Society: A Short History* (Abingdon: Rutledge, 2013), 2. Ibid., vii.

James J. Duderstadt, *Intercollegiate Athletics and the American University: A University President's Perspective* (Ann Arbor: University of Michigan Press, 2003), 6.

Ibid., 7. "[Collegiate sports] not only threaten the academic welfare of their participants but the integrity and reputation of the very institutions that conduct them, our colleges and universities." (x).

https://www.insidehighered.com/sites/default/server_files/files/Sports%20Pose%20Growing%20 Risk%20for%20Universities.pdf

Andrew Hacker and Claudia Dreifus, Higher Education?: How Colleges are Wasting our Money and Failing our Kids—and What We Can Do About It (NY: St. Martin's, 2010), 84.

The Role of Signaling from a Student Perspective Concerning Math Remediation in Transition from High School to Community College

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Abstract

The purpose of this study is to obtain the perspective of students attending a rural community college in a Midwestern state regarding why they were placed into a remedial algebra course when enrolling directly out of high school. The study uses the concept of signaling to examine how students interpret signals from sources such as counselors, teachers, peers, and policies. Understanding how students use the plethora of signals sent from various sources, including what they discern to be signals, may help community colleges address the growing problem of remediation. This study has implications for K-12 and higher education by shedding light on the information students use to prepare for college.

Introduction

How do high school students make decisions about college preparation? To whom do they listen, and how do they process all the college information that is sent their way? The transition from high school to college is a much-studied phenomenon (Boswell, 2000; Bueschel, 2003; Cabrera & La Nasa, 2000; Conley, 2007; Kirst & Bracco 2004; Kirst & Venezia, 2004; Nunley, Shartle-Galotto, & Smith, 2000; Terenzini et al., 1994), but more needs to be known about the growing number of students who are testing into remediation (McClenny, 2009). If the way students assimilate information about college preparation can be better understood, students can be sent more deliberate signals that can help them prepare for and complete college. The concept of signaling is used in this study to provide a lens through which to study the way high school students think about community college preparation.

Provasnik and Planty (2008) conducted a national survey of postsecondary students in 2003–2004 and found that 29% of students enrolled in community colleges reported taking some type of remedial coursework in their first year. The most common remedial course for all beginning postsecondary students was math, with 22% of beginning community college students taking remedial

math. In a survey conducted by the Conference Board of Mathematical Sciences, Lutzer, Rodi, Kirkman, and Maxwell (2007) found that approximately 57% of the 2-year college mathematics enrollment in the fall of 2005 was in precollege or remedial courses, and the nation had seen a 21% increase in remedial math enrollment in 2-year colleges from 1995 to 2005. This increase in remedial math enrollment within a 5-year period sends a warning signal that math preparation for high school students is failing.

Between 1972 and 1997, the rate at which high school completers enrolled in college in the fall immediately after high school increased from 49 to 67%. Since that time, the rate has fluctuated from 62 to 69% (Planty et al., 2008). The growth in community college enrollment has increased five-fold since 1965 as compared with the growth in 4-year institutions, which has doubled in that same period (Rosenbaum, Deil-Amen, & Person, 2006). In the fall of 2009, 29% of full-time students attended public 2-year institutions, the most recent date national enrollment figures were available (Aud et al., 2011).

Community colleges have the largest responsibility for remediation, often because of state policy and because they are open-admission institutions serving large numbers of low-income, minority, and academically underprepared students (Greene, 2008). The comprehensive mission of community colleges, combined with the open-door policy, provides access (Cohen & Brawer, 2008) and contributes to the growing number of students who enroll in these institutions (Greene). Community colleges are often the institution of choice for students finishing high school who are uncertain of their college pursuits and who lack a college preparatory background (Kirst & Venezia, 2004; Rosenbaum, 2001). This mission beckons to first-generation college students and their parents that college is a viable option, planting the seed that a college education and upward mobility are indeed possibilities. However, Rosenbaum (2001) believed the pervasive "college for all" (p. 3) philosophy espoused by community colleges and touted by high school counselors misleads students. He argued, "Second chances are a fundamental American tenet. However, open-admission policies and remedial programs inadvertently convey to students that high school is irrelevant and that there are no penalties for poor effort" (p. 3). Rosenbaum goes on to speculate that students may not perform to their full potential because they know they have the safety net of entrance to a community college. There is empirical evidence to support Rosenbaum's claim. A list of "Ten Myths That Students Believe About College" (Kirst & Venezia, 2004), in which students verbalize their perceptions of college preparation,

includes five myths, stated in the first person from the perspective of a student, that are especially pertinent to this study:

1. Meeting high school graduation requirements will prepare me for college.

2. Community colleges don't have academic standards.

3. It's better to take easier classes in high school and get better grades.

4. My senior year in high school doesn't matter.

5. I can take whatever classes I want when I get to college. (p. 295)

In addition, students do not take advantage of activities and information that are designed to assist them. Kirst and Venezia found that 25% of the students they interviewed as part of the Bridge Project, a research and policy initiative conducted by scholars at Stanford University, indicated they had not participated in college preparation activities such as attending a college night, nor had they taken the ACT or SAT.

Along with the pursuit of a college degree, the realization that the academic skills required by colleges are not in alignment with the curriculum of most high schools has become apparent (Kirst & Venezia, 2004; Merchant, 2004; Venezia, Kirst, & Antonio, 2003). This finding runs counter to the expectations of the public, including parents and students. Specifically, it seems logical that parents and students would assume that when a high school diploma is awarded, the recipient has acquired the skills to pursue a college education. However, this assumption is not a safe one because a high school diploma does not necessarily entitle a graduate to begin college without first completing remedial courses (Bueschel, 2003; Rosenbaum, 2001).

Remedial education offered by community colleges typically refers to the areas of reading, math, and English (Roueche & Roueche, 1999). The term *remedial education* is used interchangeably with *developmental education* in much of the literature. However, the term *developmental* is more acceptable to students and avoids assigning them a *remedial* label in their first college experience (Casazza & Silverman, 1996). Consistent with this definition, the motto of the National Association for Developmental Education (2006) is prominently displayed on their website (http://www.nade.net/aboutnade.html) as helping "underprepared

students prepare, prepared students advance, and advanced students excel." Grubb (1999) defined remedial education as "a class or activity intended to meet the needs of students who initially do not have the skills, experience or orientation necessary to perform at a level that the institutions or instructors recognize as 'regular' for those students" (p. 174). In Grubb's analysis, remedial education is about filling a gap rather than promoting development along a continuum from beginning to advanced student.

Bailey, Jeong, and Cho (2008) used data from Lumina Foundation for Education's Achieving the Dream initiative to categorize remedial math as (a) one level below the entry-level college course; (b) two levels below; and (c) three or more levels below. Their schema suggests remedial math in community colleges falls into one of three categories: (a) basic math, (b) beginning algebra, or (c) intermediate algebra. Similarly, Merisotis and Phipps (2000) noted that many community colleges require multiple levels of mandatory remedial course work before students can enter a college-level math course, and no remedial math courses count toward a degree.

Upon entering college, many high school students find they must complete remediation before registering for college-level courses, particularly students who opted out of the college preparatory curriculum at the K-12 level (Kirst & Venezia, 2004). This news is delivered to the students after they have taken a college placement exam, which is a test that determines a student's skill level in reading, math, and English. Analysis of the postsecondary transcripts of 1,992 twelfth graders who attended college between 1992 and 2000 revealed a 61% rate of remediation for public 2-year attendance and a 25% rate for 4-year institutions (Wirt et al., 2004). For students who lack adequate preparation to enter selective colleges and universities, the community college is the preferred higher education institution to transition to the postsecondary level.

Several factors contribute to the increasing remediation among high school graduates, but three stand out as particularly important to the transition of students from K-12 to postsecondary education (Kirst & Venezia, 2004). These factors are (a) admissions, (b) first-year college placement or advising, and (c) the state-level impact on K-12 and postsecondary education. Kirst and Venezia theorized that policy signals and incentives, or the lack thereof, play a major role in the decision-making process of high school students preparing for college. In a study of the alignment between policy and curriculum in six states, two states (California and Maryland), demonstrated a lack of alignment

of the math curriculum. To bridge this alignment gap, two California community colleges devoted approximately 33% of their math schedule to remedial offerings. In Maryland, the campus of Rockville College reported that 63% of high school graduates required remediation in math, whereas 44% of graduates from an incoming high school needed remediation in math in another Maryland community college.

Based on the results of a subsidiary study within the Bridge Project, Bueschel (2003) tied remediation in math, reading, and English to curriculum alignment and college preparedness. She suggested that students receive signals about their readiness and expectations for college, but little is known about these signals:

> More needs to be known about the signals sent to students about the expectations and requirements for entering community college. While the message that two-year institutions welcome everyone seems to be coming through clearly, there is a far dimmer signal about college-level expectations. (p. 281)

Bueschel identified communication between community colleges and high schools as an area that warrants more research. She commented further,

> Despite a decrease in the skills and abilities of many entering students, aspiration to transfer remains high. Students need to understand not only what it takes to succeed in transfer, but that basic skills in literacy and numeracy are necessary for occupational and vocational programs too. (p. 281)

However, the problem is more than issues with communication between the two educational entities; it is also related to how students think about college preparation and what signals influence their decisions.

Signaling

This study examines the process of signals to students about their readiness for college-level mathematics. The signals are captured in six themes that students identified through one-on-one interviews. The study used signaling theory as a lens to understand their transitions from high school to community college and their placement in mathematics, specifically in Intermediate Algebra, a class below the college-level mathematics threshold. Data collected through one-

on-one interviews with 10 students were analyzed and summarized to answer the second research question, "What phenomena do students interpret as signals about their readiness for college-level mathematics, and what is their understanding of how these signals have influenced their college transition?"

Spence (1973) defined signaling as way that educational credentials convey to employers the skill levels of new employees. In his theory, an educational credential is easy for an employer to recognize, but not all signals are readily discernible by the receiver. For example, despite their active participation in the educational process beginning in kindergarten and extending through high school, students may not understand how the educational process contributes to their preparation for college; they may not recognize signals about their readiness to continue beyond the K-12 education level. What constitute signals and how signals are conveyed to students while they are in high school may influence the decisions they make and the behaviors they engage in when they transition to college. Thus, signals that emanate from the educational process, from many different places and in many different forms associated with high school, in particular, may influence students' decisions and behaviors with their transition to college.

Kirst and Venezia (2004) drew upon Spence's signaling theory to examine signals they believed influenced the decisions and behaviors that students make as they pursue their education. Their study proposed that educational policies send signals to students, and they also argued that policies governing curriculum alignment (or lack thereof) from K-12 to college signal what students need to know and how they need to perform to be ready for college. From their perspective, public policy on education should convey an educational message (or signal) that positively influences students' decisions and behaviors concerning college preparation and college enrollment. However, policies may influence students' preparation for college even when they do not understand fully how they work. Undoubtedly, students experience education in many different ways, and they interpret their experiences through a multitude of lenses. They may or may not understand how policies as abstract as curriculum alignment affect college preparation, but they do ultimately understand whether they are prepared for college. When students fail the community college placement test and are placed in remedial mathematics, they receive a clear signal that they are not prepared for college. What signals students receive about their preparation in mathematics when they are still in high school and how they interpret those signals represents the focus of this study.

This study specifically explores signals related to students' preparation to transition to the community college in mathematics, with the data collection focusing on students' interpretation of their educational experiences in high school mathematics courses and their self-assessment of their preparation for enrollment in an Intermediate Algebra course offered by the community college. The definition of *signal* that I used in this study was that a signal is a message (direct or indirect) that students receive that influences their thinking, decisions, actions, or behaviors concerning their preparation to enroll in college-level mathematics. I came to understand the students' interpretation of the signals associated with their high school mathematics courses and college preparation through one-on-one interviews, which provided me with insights into their personal experiences.

Through interviews with students, this examination deduced that many signals associated with mathematics were by-products of a policy or action that was undertaken by someone else, for example, a mathematics teacher, a guidance counselor, an athletic coach, or a school administrator, and they often also had an unexpected outcome. These signals were abstract and indirect in nature, and yet they had a potentially powerful influence on students' decisions and behaviors. For example, the anger of a mathematics teacher in a high school classroom was interpreted by some students as a signal that they were incapable of learning mathematics. Although the teacher's wrath may not have been intended to signal to students that they were incapable of learning mathematics, the students had the impression that they were incompetent learners, and this perception had a lasting influence for some. Another example of an indirect signal was the lack of resources to support students' schooling in their rural communities. Poverty was a reality for the students in my study, and it created numerous barriers to their preparation in mathematics through the turnover of high school personnel, the lack of college-preparatory courses in mathematics (and other subjects), and the lack of family support to study college-preparatory courses.

It should be noted, however, that not all signals were vague and indirect. Some signals were clearly conveyed and readily received by students, and they influenced students' decisions and behaviors in important ways. An example of a clear and compelling signal about college preparation that was mentioned by several students was an English teachers' classroom discussion about the need to prepare for college and the necessary steps that students should take to be adequately prepared to enroll. Several students identified the English

teacher's classroom as the place where they received clear signals about college preparation that helped them transition to the community college.

This examination is organized into six categories of emergent themes about signals:

1. Placement and performance in mathematics;

2. High school guidance;

3. Mathematics teacher impatience;

4. Mathematics instruction engagement;

5. Lack of K-12 resources in relationship to mathematics instruction; and

6. "Someone to push you" in high school.

Together, these themes portray a picture of the signals that students received about high school mathematics and their preparation to transition from high school into college-level mathematics at the community college. I used information gathered from one-on-one interviews with students as my primary data source, and I used information gathered from high school and community college faculty and administrators to triangulate with the students' interviews to make sense of the signals they identified.

Placement and Performance in Mathematics

This theme refers to the perceived misplacement by students in a high school mathematics class based on their belief that high school courses were either too easy or too difficult for them. *Misplacement* is defined in this study as students' being required to take a mathematics course that was either above or below their perceived ability level. A result of misplacement was that students were bored if the class was too easy and frustrated if it was too difficult. Misplacement also signaled to students that their high schools were not managed in ways that facilitated their learning, including providing information that would prepare them for college. For example, some students perceived that they were misplaced in a high school mathematics course, and they interpreted this misplacement as a result of incompetent advisement. This misplacement could have occurred because the students were not advised properly on what mathematics courses to take, because the high school and community college

curricula were not aligned, or because of other factors not accounted for in the students' depictions of their high school experiences. Nonetheless, a universal result of misplacement was that the students felt inadequately prepared in math, and they were discouraged by these experiences.

Misplacement in the mathematics curriculum in high school extended to the community college. A contributing factor to students' perceived misplacement in the community college mathematics curriculum emanated from their mathematics placement test scores and their perception that the exams were not assessing their mathematics skills in a way that was logical or accurate. The students interpreted their misplacement in remedial math as a lack of commitment to their education, and specifically to their need to learn mathematics while in high school. Four students were selected to explain this theme because they spoke about their perceived misplacement in the high school mathematics curriculum and how it affected their experience with mathematics in the community college. Their experiences helped to explicate the themes of misplacement and performance in mathematics.

The first depiction is of Nicole, whose experience with mathematics demonstrates the confusion and frustration that students face when the high school's assessment of a student's performance in mathematics does not align with the student's own interpretation of his or her performance. Nicole is a student whose experience with high school mathematics seemed to have been positive because, according to her high school transcript, she was an average student her first 3 years in mathematics and did well in calculus her senior year. Nicole received an average grade of C in Geometry her freshman year, in Algebra II her sophomore year, and in Pre-Calculus her junior year. Although not a stellar performance, Nicole received average grades, and she perceived that she was a competent mathematics student. She liked mathematics, and she decided to take Calculus her senior year of high school. She believed Calculus was her forte, and she eventually chose to pursue a degree in engineering because of her mathematics performance in her high school calculus class. Receiving a high B, Nicole interpreted her Calculus grade as a clear and direct signal that she was ready for college mathematics. However, this was not the case. When Nicole took the community college placement test, she tested into Introduction to Algebra only. At the time of our interview, Nicole had advanced to Intermediate Algebra at the community college. When asked if she thought the difference in mathematics teaching styles from her freshman to her senior year of high school had anything to do with her sudden improvement and

success in calculus, she said, "No." Nicole explained that her calculus class had only three students, and she implied that the small class size contributed to her ability to do well in the class. It was wondered if the rigor of her calculus class might have contributed to her grade because she had been an average mathematics student earlier in high school.

A second vignette, from Bea, suggested that the advice of a guidance counselor could stifle students' interest in mathematics and signal to them that they are incapable of learning it. Bea mentioned a time when she wanted to take an Algebra I course during her freshman year but was discouraged from doing so by her high school guidance counselor:

> I think when I first started, it was my freshman year, the
> Prealgebra, I wanted to go ahead and go into Algebra I,
> because that's what most high schools do, freshman year,
> Algebra I [is] mandatory. And I wanted to stay on that level,
> and she [the guidance counselor] didn't let me take it, and I
> had Prealgebra, which I made…I had 97 or 98 average through
> like the whole year, which I felt was kind of a waste of a year of
> math for me.

The review of Bea's high school transcript confirmed that she had a 98 average in Prealgebra her first semester as a freshman and a 95 average her second semester. She believed that her performance in Prealgebra provided a clear signal that she should have been placed in the Algebra I class her freshman year rather than the Prealgebra class. Bea also observed that in her junior year, her guidance counselor had misplaced her in a lower level mathematics class than she was capable of taking. She explained,

> I wanted to take a different [more advanced] mathematics class,
> and she [the guidance counselor] wouldn't let me. She thought
> I was placed too high, but the class that I had before was, like I
> said, not a challenge at all.

Bea's transcript showed that she began her freshman year with Prealgebra and that she took Algebra I her sophomore year, Geometry her junior year, and Algebra II her senior year. She received a solid B in Algebra I, a high C in Geometry, and a low B in Algebra II. Bea's perception of being misplaced in mathematics followed her into college and undoubtedly contributed to

her lack of college preparation, as demonstrated by a college mathematics placement test score that placed her in an Introductory Geometry class even though she had completed Geometry in high school with a grade of C. What Bea did not seem to understand is that a grade of C in high school Geometry did not equate to college-level preparation in Geometry. In my interview, Bea also revealed that she did not feel equipped to challenge her mathematics placement test score at the community college or to advocate for herself.

A third vignette showed that patterns of mathematics course-taking that varied from what Treisman and Cullinane (2010) called the normative mathematics course sequence (i.e., Algebra, Geometry, Trigonometry, Calculus) left students confused about their mastery of mathematics. Skipping courses in the mathematics sequence created holes in the students' knowledge of mathematics that had a detrimental effect on their preparation for college mathematics. This problem was evident in Dawn's high school transcript, which revealed that she took Prealgebra her freshman year and received a C, Algebra I her sophomore year and received a C, no mathematics her junior year, and then Algebra II her senior year and received a grade of D. As a result, Dawn had a gap in her mathematics course-taking that left her without any mathematics course from the end of her sophomore year to the beginning of her senior year. Given her pattern of mathematics course-taking, it was not surprising that Dawn made a grade of D in Algebra II her senior year. According to my interview notes, Dawn's experience was also complicated by having had three different guidance counselors in high school, which may have contributed to the gap in mathematics her junior year.

In a fourth example, Patricia's mathematics course-taking included skipping mathematics her senior year, a common pattern among high school students in the United States (Ingels, Dalton, & LoGerfo, 2008). Ingels et al. reported that in 2004, 34% of high school seniors did not enroll in any mathematics courses, and this lack of senior coursework created a gap in college-level preparation in mathematics. This vignette is particularly unfortunate because Patricia excelled in Trigonometry her junior year, receiving a grade of A. When Patricia was asked about whether her mathematics teacher or a guidance counselor had advised her to take mathematics and about the potential consequences of omitting mathematics in her senior year, she said she had not been advised to take mathematics as a senior.

In summary, when students experienced some form of misplacement in the mathematics curriculum, whether at the high school or community college level, they were confused and frustrated. They perceived misplacement in mathematics as a signal of their inability to perform in the mathematics classroom, and this misplacement added to their lack of confidence in their mathematics ability. A particularly disturbing consequence of the misplacement signal was not one that the students could voice or perhaps even realize, but one that became evident when they took the college placement test and learned that they were not prepared to take college-level mathematics, an effect that cost them time and money. As one of several remedial courses offered by community colleges, Intermediate Algebra does not count toward a college degree, so it is an additional course that students must complete before they can enroll in a college-level mathematics course required for their chosen degree.

The students did not seem to understand the importance of mathematics while they were attending high school or the importance of the community college mathematics placement exam. High school transcripts revealed that the course-taking patterns of some students did not follow the normative course sequence, which affected their readiness for college-level mathematics. In addition, two of the students did not take mathematics their senior year, which may have influenced their recall and performance when they took the community college placement exam. In a recent study, Venezia, Bracco, and Nodine (2010) recommended that high school students be assessed early and often during high school and that their high schools target them to receive information about transition to a community college. This recommendation makes sense, because the students interviewed did not seem to understand the importance of the placement exam or the consequences of being placed in a remedial mathematics course. This theme was places first because of its addressing misplacement in the mathematics curriculum and counseling students to develop a strategy for mathematics course-taking in high school are crucial to improving their success in the community college.

High School Guidance and Counseling

Although the guidance process would seem to be one of the most obvious ways to signal to students their preparation for college, the high school students in my study did not believe their high school guidance departments had contributed to their college preparation or planning for college. Most experienced a very limited time with guidance staff, and they processed the lack of attention from counselors as a signal that they were not college material.

Even though the students' comments regarding guidance were typically not explicitly about mathematics, these students did not have confidence in their high school guidance personnel to prepare them for college. Six of 10 students did not use the guidance office at their high school at all, citing inattention from staff or discomfort with approaching staff to ask for help. Two students pointed out that the guidance counselors were more focused on students attending universities than students like themselves, who intended to enroll in a community college.

It is interesting to note that despite the pattern of limited or poor guidance, most students were reluctant to say that their guidance counselors were inadequate. Four students mentioned that their counselors did not have (or make) time to meet with them or provide adequate information about college. For example, Rena said, "I guess she had a lot going on. She just wasn't really helpful." She went on to explain that she and other students were referred to a filing cabinet in the guidance office to find materials for themselves, and she felt frustrated by this advice. Similarly, Michelle, who attended a different high school, mentioned that her guidance counselor was always giving students pamphlets, as though a piece of paper was adequate advice to prepare for college. Another student, Patricia, was more direct in her assessment of high school counseling, saying, "It wasn't until the last year that we had a very good guidance counselor," and even then, her access to the counselor was limited. She speculated that a "better guidance counselor" would have helped her prepare for college. Another student, Bea, said she did not use the guidance office as a resource because, as she put it, "You didn't feel comfortable in going in and getting information there."

In another example that suggests the complexity of guidance as a signal about students' preparation for college, Marie explained that she had access to guidance personnel in her high school and that she did not feel intimidated, but Marie "felt like she was getting nowhere." Marie observed that the guidance office was disorganized and that the guidance personnel did not make sure things were done properly, which she equated with incompetence. She spoke about a frustrating experience in which her high school transcript was lost or was not sent to a college, which colored her perception of the guidance staff. She felt she could not rely on them, and she lost faith in their support. She offered an especially poignant observation when she said that she felt prepared to graduate from high school but unprepared to enter college, and to her, that

was a discouraging signal. She said, "I guess they just tell you what you need to graduate [from high school], and then they really didn't prepare students to come to college." She said that she did not begin to think about the relationship between her high school coursework and college requirements until her senior year, when she decided to major in business. However, at that point, it was too late to address the stringent mathematics requirements needed for her chosen college major.

Like Maria, another student, Patricia, who was mentioned earlier in this section, pointed out that the timing of guidance was important. When asked if she had received advisement from the guidance office about mathematics and college preparation, she replied,

> Well, it wasn't until last year that we had a very good guidance counselor. If you were lucky enough to get her when nobody else was there, it was surprising. You always had to have a meeting with her or you wouldn't be able to get her. I was there like once every week tryin' to get some information that I needed, but she was pretty busy, especially since she was one of the ones that actually would try to help people. Cause our guidance counselor, yeah, she was crappy.

Patricia's disparaging comment about guidance was prompted by my asking her if she had received any information about preparing for college-level mathematics. She quipped that, overall, she had not had a good experience with guidance.

Similarly, Bea said she had struggled in the last month of her senior year, referring to feeling intimidated by the thought of attending college (a theme she repeated multiple times during my interview with her). It is interesting to note that Cox (2009) devoted an entire chapter to the fear factor of college and identified math and composition as evoking the most anxiety. Bea felt that the high school guidance counselor focused more on students who already knew what they wanted to do, particularly those who wanted to attend a 4-year college. Describing her counselor, Bea said, "She was focusing more on the people [who] already knew what they were doing, and like, getting scholarships and all that straightened out, so I didn't go to her."

Another student, Shawn, echoed this same sentiment about students needing to know what they wanted to do, particularly knowing they wanted to attend a 4-year college, to get help from high school counselors, saying,

> My high school counselor…she was more into the people that were going to 4-year colleges, like straight out of high school. She didn't really help us that were coming to community college. I guess she figured we could figure it out on our own. Cause it's not a big school or nothin', so she didn't really work too much with us that didn't go to big colleges.

The signal received by Bea and Shawn was that preparing for college was not as important for students attending the community college as for students attending 4-year colleges and universities. These two students sensed the preferential treatment being given to some students in their high school, and they also understood that they were not on the preferred list. They both felt that students preparing to attend community colleges were not as important to the guidance office because they did not receive a signal from guidance personnel that suggested they needed to prepare for college-level mathematics or for college in general.

The guidance and counseling process can be crucial to the success of students transitioning to college and is especially important to students who are average academically, who are first generation, and who have not had the benefit of college literacy at home. The aforementioned examples portrayed students who felt uncomfortable with guidance personnel or who did not use the guidance office to prepare for their college transition. The students interviewed needed in-depth guidance about college to help them understand what it takes to transition to any college. If students were counseled by guidance personnel about the transition to college, including being counseled about preparing for college-level mathematics, they would receive a clear signal that could be very influential in their preparation for college.

In fairness to the guidance counselors in public high schools, their roles have changed through the years. There is evidence that in day-to-day practice, the efforts of counselors are largely dedicated to the tasks of scheduling, testing, and discipline (McDonough, 2005). Across the United States, the student-to-counselor ratio is reported to be 284:1, but in schools with 20% or more minorities and in large schools, the ratios are even higher, at 300:1 (Wirt et al.,

2004). There seems to be little time left to dedicate to counseling for college preparation, especially for first-generation students who need more information and a deeper level of counseling. Several studies suggest that improved counseling would influence college preparation for low-income, rural, and urban students as well as students of color (Gandara & Bial, 1999; King, 1996; Plank & Jordan, 2001; Rosenbaum, Miller, & Krei, 1996; Venezia et al., 2003).

Mathematics Teacher Impatience

The impatience and anger of mathematics teachers were interpreted by students as a signal that they were incapable of learning mathematics. For example, Patricia was a Latina student in a predominantly White high school who took responsibility for her grasp of mathematics but who felt that one mathematics teacher's attitude was a turning point in her learning the subject. Patricia recognized what was effective instruction because she had experienced a teacher in a junior high Prealgebra course who had modeled the attributes of a good teacher. Patricia said of her mathematics teacher, "I liked her because she actually explained the work to us." Patricia believed she had a gift for mathematics, but she connected her performance in and understanding of mathematics to her relationship with the teacher. She explained how her relationship with a mathematics teacher affected her performance:

> And I went to, I think it was Geometry, and it was hard because I didn't like the teacher. And she was confusing, always screaming at us 'cause of something, 'cause we couldn't understand it. She should have taught college! She needed to slow down (laughs).

Patricia mentioned the teacher's anger because the students did not understand a concept and their resulting bewilderment. The anger and impatience of the teacher signaled to the students that they were somehow deficient because they did not understand. Not only did this approach to teaching make the students feel inadequate, but it also left them with a negative attitude toward mathematics overall.

In a similar vignette, Michelle related how she was counseled to prepare for the next mathematics class, with no discussion about how to plan ahead or the importance of preparing for college-level mathematics. She was advised to focus on the current year, which seemed contrary to the notion that high school students should begin planning for college from the beginning of high school

during their freshman year, or before. Michelle also had a negative experience with a mathematics teacher who influenced her attitude about mathematics. She reported,

> Our teacher, I had, there was one of the teachers that kind of expected everyone to know. It was like, "I know how to do this, why don't you?" It wasn't much teaching, but you should know how to do this. Kind of like if I didn't know I felt like that I should and it was kind of just expected for everyone to know. And he would get angry if people didn't know what he was talking about. And then I took him for like 2 years, and after I got out of his class and went to the other teacher I did a lot better in that class.

Both Michelle and Patricia had vivid recollections of a point in time when a mathematics teacher had negatively affected their mathematics education. For them, it was not just the anger, but also the air of superiority reflected in Michelle's statement that her teacher had "just expected for everyone to know." No one learns well under duress, and when a teacher makes students feel inadequate, it seems that students begin to believe they are incapable of learning the subject. An angry mathematics teacher sent a signal to some students that influenced their understanding and preparation for mathematics.

Teacher misbehaviors have been identified as behaviors that interfere with instruction and learning (Kearney, Plax, Hays, & Ivey, 1991). Specifically, one of the identified behaviors studied by Kearney et al. was offensiveness; this concept was defined as teachers sending insulting messages. I believe some of the students' experiences with mathematics instructors personified offensiveness, and students perceived the teachers' offensiveness as an indicator that they were not worthy of the mathematics teachers' time to teach them mathematics. As a consequence, the students believed they were not capable of learning the mathematics that was needed to enter college-level mathematics.

Impatience seems an inadequate word to describe the effect of an angry mathematics teacher on a high school student who does not understand a concept. Two students interviewed in the study experienced anger from a teacher in a mathematics classroom when they were struggling, and they consequently believed that their learning was affected adversely. The signal sent by the mathematics teacher to students was one of ineptitude, and as a

result, the students felt that they were incapable of learning mathematics. The Mathematical Sciences Education Board (1989) described the outcome of a learning environment that is not conducive to learning mathematics as follows:

> Unfortunately, as children become socialized by school and society, they begin to view mathematics as a rigid system of externally dictated rules governed by standards of accuracy, speed, and memory. Their view of mathematics shifts gradually from enthusiasm to apprehension, from confidence to fear. Eventually, most students leave mathematics under duress, convinced that only geniuses can learn it. (p. 43)

When students experience the anger of a teacher because they cannot learn the mathematical concepts with the pedagogical method being used, they become apprehensive about mathematics and eventually fear being embarrassed because they do not understand. In this theme of mathematics teachers' impatience, the poorest type of mathematics instruction was demonstrated when students lost their confidence and became fearful of their inability to learn mathematics.

Mathematics Instruction Engagement

Although not all mathematics teachers showed anger in the classroom, some simply did not engage the students in learning what they considered to be effective. Seven of the 10 students talked about a mathematics instructor who had influenced their understanding of mathematics in a negative way. Students interpreted the teachers' inability to help them learn mathematics as a signal of indifference and lack of commitment to their learning. Many of the students reported being bored and feeling annoyed with mathematics. One student said that out of frustration, she taught herself with the aid of the book and homework. This study came to understand, based on my interviews, that the teachers' appreciation for the subject of mathematics takes priority over their interest in helping others' learn mathematics. Teachers' presentations of concepts, their reactions and responses to students' questions, and their grading influenced students' learning of mathematics and the students' overall attitude toward the subject. The relationship between teachers and their students, including their delivery of instruction, is paramount to students' learning. The students in my study suggested that some mathematics teachers approached mathematics instruction with an attitude of superiority, expecting

students to be at a higher mastery level of mathematics than they were and to comprehend concepts quickly. When the students did not, they felt inadequate and incompetent.

Below, are presented excerpts from student interviews that support my claim that high school teachers who are perceived by students as indifferent toward their learning of mathematics send a signal to students about their lack of preparation for college-level mathematics. Losing ground in a high school mathematics class diminishes a student's chances of being ready for college-level mathematics.

In the first example, Rena talked about losing her stride in Algebra II because she felt the teacher could not teach. Rena attributed her struggles in Algebra II to a misalignment between the intellect of the teacher and the learning needs of the students, saying. "'Cause the teacher was really smart, like way too smart to teach us. She wasn't a bad teacher, I just couldn't learn sittin' in her classroom 'cause she talked over my head." In contrast, in her senior year, Rena took Algebra III and did well because "the teacher was really like down to earth." Rena described the Algebra III class as "being a lot easier" because of the teacher.

Confirming the difference between Rena's experience with what she considered to be good ("down to earth") instruction and bad instruction, Shawn gave an example of the power of good instruction in one of her high school mathematics courses:

> I had a very, very good teacher for the first semester. He was
> an awesome teacher. Like if you didn't get it, he would take
> the time to explain and help you personally where you were
> struggling at. He would look at your grades and what part you
> were having problems with and explain it to you and stuff.

Shawn admitted that her experiences in high school mathematics courses were not all positive though. She described her high school geometry as "more like what college is now," and as a result, she felt that she "did not learn anything from geometry." She believed that her homework was not graded because there was no feedback and she got perfect scores, observing, "If you did it, he gave you a 100." There was no opportunity to learn from homework because

it was never graded. The signal that Shawn received was disinterest on the part of the instructor, which led her to view mathematics negatively. She later reiterated in the interview that she had "no idea how to do geometry."

Shawn linked her success in mathematics to the ability of the teacher to teach mathematics. She felt she was learning with one particular teacher, but when this teacher left halfway through the school year, her learning stopped, and it is no wonder. She reported that the rest of the year involved having the class watch movies or having a substitute, whom she described as "a terrible teacher." She said,

> We had a terrible teacher take his place and he was highly recommended. All the teachers liked him. But he came in the last part of my sophomore year and was trying to look at the classes and stuff, and he would stay in there. I just really did not like him. He wasn't a very good teacher, so I didn't take any of his classes.

As a community college student, Shawn experienced frustration again, describing her college Intermediate Algebra teacher as very boring. She admitted that to adjust, she was teaching herself with study guides, saying,

> If the teacher does not…if I don't like the teacher, I'm not going to do good in it because it just doesn't help me at all. Like my Intermediate Algebra teacher now. I sleep through all of his classes every day, I sleep. He is so dry, so boring, it just, he does not help me at all (laughs). When I go home he gives us a study guide, I work on the study guide, I look in the book, I look at…I got a student manual for the book that has the answers of all the odd questions and how you do them and that's pretty much how I learn for his class. I teach myself because I sleep through the entire class. I don't necessarily care for the way he teaches.

Similar to Rena and Shawn, Michelle had a negative experience with mathematics her freshman year. She reflected on her high school mathematics experience, saying,

> It was right when I started in high school. My freshman year I was in his class. And then it was just like, wow. 'Cause like

> everyone would talk about him…He was a good person, but it was like teaching…He just has a different way at going at things. It just wasn't what we were used to. It was kind of like a professor in college.

Michelle's characterization of her teacher as being "like a professor in college" echoed the sentiments of other students interviewed.

The signal for these students from the mathematics teachers was one of superiority or, even worse, a total lack of interest. They recognized good and effective teaching when they experienced it, and they also recognized bad and indifferent teaching when they experienced it. Although anger was not present in these examples of mathematics teaching, for one student, the fact that her mathematics teacher taught "like a professor in college" created duress and stifled the learning environment for students. They felt that the mathematics instructor was talking over their heads and was incapable of presenting lessons in a way that was conducive to their learning. Ineffective teaching, whether involving anger or indifference, is a signal to the student that influences their understanding of and preparation for college-level mathematics.

Kearney et al. (1991) suggested that mathematics teachers' incompetence represents another form of teacher misbehavior that can be detrimental to students' learning. Incompetence is manifest in boring lectures and a lack of knowledge of course content. Consequently, teachers leave students with the perception that they do not know what they were doing. According to Toale (2001), student learning is jeopardized when any misbehavior is exhibited by a teacher. Whereas anger was not displayed in all high school mathematics classrooms, some of the high school mathematics instruction was not delivered in a way that would engage the student. One teacher was described by a student as "way too smart to teach us," and in another example, a student explained that she struggled to learn mathematics '"cause she talked over my head." These examples of student experiences lent credence to the sentiment expressed in the Mathematical Sciences Education Board (1989) report that students believe mathematics is a subject that "only geniuses can learn" (p. 43).

Lack of K-12 Resources in Relation to Mathematics Instruction
The lack of rural, K-12 resources contributed to faculty and administrative turnover and sent signals to students that their education lacked value. This theme was associated with the rural area the community college serves and

the poverty level of its residents. Although the lack of K-12 resources seems to be a level removed from mathematics instruction, it had an influence on how students experienced mathematics instruction. Poverty and the remote, rural location of the schools were associated with resources lacking for education, which seemed to limit opportunities for students in mathematics, as well as other areas. This deficit was confirmed by administrators in the high schools and faculty in the high schools and community colleges. Students were aware that administrative and faculty turnover was a problem for their high schools in general and their mathematics classes specifically. The following excerpts from student interviews show how the lack of K-12 resources signaled to students, disregard for their preparation for college-level mathematics.

In one of the high schools attended by Dawn and Marie, not only had there been turnover among the mathematics faculty, but the students had also had three principals, two superintendents, and two guidance counselors during the 4 years they were in high school. Both students talked about the high turnover of personnel in their high school. Their education was disrupted with new administrators, who influenced how classroom teaching would be delivered and how the larger institutional environment would be represented to students. Turnover among guidance counselors and teachers would have a more noticeable effect on students because they work closely with students, and they establish relationships with students that thrive and grow in stable circumstances.

Dawn talked about her experience with mathematics instruction and its inconsistency in high school. She observed how her own performance in a mathematics course was influenced by teacher turnover:

> My one teacher, he mainly talked about his personal life. He'd talk about what he did on the weekend. He still lived with his momma. Yeah, I knew a little bit too much personal stuff about him. It wasn't cool. And then he left, and we got a better teacher and she was pregnant and she went on maternity leave. So another teacher's daughter stepped in, and I got an A in her class. And right before the school year ended, like 2 weeks before, she came back and my grade dipped down to a C. I would have had an A, but it dropped down to a C because she was there.

Dawn was frustrated by signals in the form of grades that were inconsistent during the teacher turnover. She experienced a chaotic year in a mathematics class that was crucial to her transition to college. The inconsistency of instruction in mathematics was compounded by the turnover of guidance counselors. With each new counselor, there was a learning curve and a loss of students' academic history. The high school that Dawn and Marie attended had three different guidance counselors during their 4 years in high school, which disrupted the guidance available for their transition to college.

The lack of K-12 resources theme identified by students was supported by comments made by faculty at the community college. Mike, a developmental mathematics instructor, said that the community college mathematics faculty had accepted that the mathematics skill level of entering freshmen would be in the Intermediate Algebra range. He noted,

> Oh, I think the school [community college] realizes our area, and they expect most students to start in either Introduction or Intermediate Algebra. We have a very good grasp on where our students are in mathematics in this area. So as far as the school is concerned, we have a lot more sections of 041 (Introduction to Algebra) and 114 (Intermediate Algebra) than we do of any of the other mathematics. And to give you an idea, we only have two sections of College Algebra, and we probably have 10 or more of 114 (Intermediate Algebra).

Mike prefaced his statement with "the school realizes our area," which seemed to be a veiled reference to the poverty and scarcity of resources for education in the region where this study was conducted. What was most disturbing about Mike's comments was the expectation that students would enter the community college with remedial mathematics skills. If true, that perception by the college personnel may contribute to students believing that their high school mathematics preparation was not rigorous enough to prepare them for college-level mathematics and furthermore, that this deficit was considered acceptable to the high school and community college.

In the second vignette, Victor, who also teaches mathematics at the community college, identified issues that seemed to be related to the poverty of the area

and lack of resources, such as the size of the high schools in the district and their inability to offer higher levels of mathematics. He noted,

> I also think that with some of the schools here in the district
> that are real small, I know when I went to high school, my class
> was 376, so it was different than around here. We had enough
> students that we could have classes at a lot of different levels,
> but here they don't have that opportunity. There's certain levels,
> but there is only one class for the students.

Victor believed that the community college accepts that students will have lower entry-level mathematics skills because of the lack of resources in small high schools.

In the third vignette, Catherine noted that a student in her Intermediate Algebra class was knowledgeable in mathematics, but "has holes." She reported confidently, "I know that Nicole has holes. She's a very good student, but when we work on some things, it's like she's never seen them before. Somehow she has holes. I don't know why. I don't know if she's forgotten or they weren't taught." As a reminder, Nicole is the student who took calculus her senior year and struggled with the community college placement exam. She ended up taking Intermediate Algebra her first semester at the community college. It is possible that the "holes" in Nicole's mathematics education may be due to the inability of her rural high school to provide qualified higher level mathematics instruction, reflecting the rural deficit reported in the literature.

The lack of K-12 resources sent a powerful signal to students about their lack of preparation for college mathematics. Administrator turnover and mathematics instruction were influenced by a lack of resources in the rural high schools. Losing mathematics faculty and counselors midyear was disruptive to the educational process, and students were quick to point out that the loss of personnel sent a negative signal to them about their preparation for college. At the other end of the spectrum, the community college mathematics faculty seemed to have accepted that many students from the surrounding rural area would arrive unprepared and need remediation in mathematics. The community college faculty accepted the lack of preparation of students, and they structured their remedial mathematics classes to accommodate it.

"Someone to Push You"

The phrase "someone to push you" came up in discussions about guidance, but it could apply to the high school overall, and I believe it has applicability to mathematics. Students seemed to be looking for the bar to be set high in all their classes and in expectations about going to college. They wanted their teachers to have some confidence in their capability of going to college, but this confidence was not apparent. It is as if the students were looking for discipline and accountability from their teachers, and they did not get it. At least 3 of the 10 students spoke directly to the lack of a teacher pushing them as a signal that they were not worthy of college. On the other hand, all the students pointed to someone who was very influential in what success they did have in high school and their subsequent transfer to college.

With respect to the theme of "someone to push you," two of the students, Dawn and Marie, mentioned wanting someone at the high school to encourage and support them. They used the words "push you" in their comments and alluded to the importance of someone having expectations for them and holding them accountable. When Marie answered the question about who sent the strongest signals to her about college attendance, she responded,

> [M]y family, my friends, and our superintendent. I'll tell everybody that, you know, it's who will push you instead of knocking you back, "You shouldn't go there." Somebody in the school because I never had that before that somebody in the school that would push you and encourage you instead of look down on you. I feel that those are my strongest signals.

Without being prompted, Dawn indicated that having someone at the high school to "push you" would have been beneficial. She chose the same words that Marie used, and this idea seems important to understanding her perceptions about her preparation for college. She described her high school learning experience as follows: "They never really checked up on you. You had to do it yourself." The impression was that "someone to push you" meant that the students wanted school personnel to have high expectations of them to set goals to not only prepare for college, but also to attend college.

In support of this theme of "someone to push you," students noted that teachers in the English discipline were doing just that. According to several

students interviewed, the high school English classes had the most activities and discussions of any high school classes about college preparation. The students reported essay assignments on college and careers to assist them in understanding how to prepare for college. These assignments were occurring in English and Advanced Placement classes, where discussions about college expectations were prevalent and inclusive of all students. Dawn mentioned frequent discussions in her English class as sending her the strongest signal about college preparation. Describing her English teacher's approach to college preparation, Dawn observed,

> She talked about it freely. She talked to us as a class. She'd just say, she'd just talk about the different colleges she went to. She'd like, through her experiences, and she said well, "If you want to go just go and…make the best of it, and get you a higher education."

Shawn's English teacher told students what skills would be expected of them in college. Shawn praised her English teacher's efforts to prepare students for college, and she noted, "If more teachers had done that, it would be easier, you know." Shawn went on to describe succinctly what should be happening in all high school classes, especially mathematics.

For Patricia, the English teacher sent a positive signal just by showing interest in the students' going to college. The teacher pushed scholarships and wanted to know where the students were going to attend college. Apparently, this teacher was encouraging to many students because I heard her name from another interviewee. Possibly representing the perspective of other first-generation students who needed special attention when it came to college preparation, Patricia referred to the same teacher named by other students, saying, "She's like our mother at school. She helps everybody out. She tries to keep us all in line." Like other students, her statement described encouragement combined with an expectation that students should be accountable for their decisions and behaviors.

In another example of "someone to push you," three students were attending college as student athletes, and they all identified coaches as sending them signals regarding college preparation. One of the athletes, Alan, began planning for college his sophomore year of high school, when his basketball coach gave

him information to prepare for college. This coach sent signals to Alan early in his high school career suggesting that he should be planning his courses in high school to prepare him for the transition to college.

The second athlete, Lewis, shared that basketball was his motivation to attend college. His high school coach advocated for his athletes and mentored them through the college application process. The student was preparing for college because he wanted to play the sport, but his coaches were promoting scholarships and education in addition to the sport. The community college coach also sent Lewis a signal of acceptance: "But Coach showed a lot more interest. He actually, he made me feel like I was welcome here."

Rena, the third athlete, also identified her coaches as sending signals about college preparation. She talked about the relationship she had with them, and she observed that they had kept her "on the right track." Rena also mentioned her softball coach as instrumental in helping her get information. She said that her coach was younger and gave her a sense of reassurance about talking about college, saying, "I felt more comfortable talkin' to her about it. She actually helped me fill out all my scholarships and references and stuff."

To summarize the "push you" theme, the signal sent by English faculty about the transition to college was an example of how a high school classroom initiative could be used to help students prepare for college. Students were eager and appreciative of the information they received in English, and if that could be repeated and reinforced in mathematics, it might help students avoid mathematics remediation in college. Coaches offered similar advantages to students who wanted to attend college to play sports. Athletes were counseled by coaches, not because of college preparation per se, but because their coaches reinforced the importance of an academic record that would qualify them for a scholarship to play sports in college. The students may not have been performing academically to be prepared for college-level work, but because they wanted to play sports, they were being held accountable to become academically eligible for their sport. These examples show how signals to students about the importance of college can have positive results on their preparation.

Conclusion

The students in this study faced many challenges when it came to preparing for college-level mathematics and college in general because they were

typically first generation and their academic background was lacking. They were not challenged, however, when identifying signals that were meaningful to them concerning their preparation for college-level mathematics. It was sometimes difficult to separate signals about college preparation in general from signals about college preparation for mathematics in particular because they are so closely related. Of the six themes identified in this study about signals concerning students' preparation for college-level mathematics, the signal of "someone to push you" stood out as the most direct and positive when it was associated with an English teacher who spoke to students about the importance of preparing for college. Based on these interviews with students who were not prepared for college-level mathematics, most signals were indirect and only loosely associated with the students' placement in Intermediate Algebra in the community college.

The implications of these themes for improving the mathematics skills of aspiring community college students are intriguing. Identifying signals that influence students' preparation for college mathematics is the first step to addressing the miscommunication that occurs between schools and students. When the students received vague or confusing signals about whether they were prepared for college-level mathematics and college in general, they were frustrated and discouraged about the possibility of attending college and being successful college-level students. Had some clear signals about what it would take for the students to prepare for college been sent to them, they might have been better prepared. None of the students identified current practices aimed at college preparation (e.g., college days) as influential. Rethinking the types of signals sent based on these identified themes may help students become more engaged and better supported as learners in high school mathematics classrooms.

Although this was a small study, the themes identified through the lens of signaling theory provide a different perspective on how students prepare for college-level math. The information gained through this study, at the very least, warrants exploration of these themes and the application of signaling theory in future studies about mathematics preparation for community college students.

Recommendations for Research Question 1
"What experiences do students identify as relevant to their transition to college and preparation for college-level math?"

The data gathered for the first question provided a meaningful context for understanding the signals that students reported regarding their preparation for college-level mathematics and college in general. These data suggested that guidance counseling and curriculum alignment are important to helping first-generation, academically and economically disadvantaged students be successful. The interview data revealed that better guidance and counseling were needed to prevent sporadic and inadequate course-taking in high school mathematics. In addition, the higher level math classes that some of the students completed in high school did not prepare them for college-level math, as evidenced by their placement in Intermediate Algebra. Despite some students receiving a satisfactory grade in a high school math course at the level of Trigonometry and Precalculus, they still tested into a remedial mathematics course at the community college.

Venezia, Bracco, and Nodine (2010) recommended that messages or signals about preparedness for community colleges should be expanded to reach 9th- and 10th-grade students so that they can obtain pertinent information early in high school, when they have the opportunity to change their schedules and the intensity of study. Coordinated efforts on the part of both high schools and community colleges to send intentional signals of college preparedness in all disciplines for the 4 years students are in high school might increase their opportunity for successful transition into community college.

Parental support and knowledge of college preparation and financial aid are factors that could enhance the success of first-generation, academically and economically disadvantaged students (Venezia et al., 2003). All the students indicated that their parents wanted them to attend college and were supportive, but the support was limited. The parents did not have the knowledge to assist their children with course selection in high school, nor did they understand how to help their children through the maze of community college application and registration procedures. Furthermore, students said their parents were daunted by the financial aid process and had little knowledge of aid money available to help their children.

At the heart of the conclusions and implications for Question 1 is the first-generation status of the students. The label itself, *first generation*, signals the challenges that being first in anything represents. In many cases, by the time students realized what they needed to be successful, they were already behind

in their preparation for college. Guidance is important to students' success, so if first-generation students and their parents are equipped with knowledge about how to prepare for a community college education early on, it might reduce the number of students who test into remedial math.

Recommendations for Research Question 2

"What phenomena do students interpret as signals about their readiness for college-level mathematics, and what is their understanding of how these signals have influenced their transition to the community college?"

1. What math teachers say and do matters, so it is important for them to be trained in a way that heightens their awareness of the signals they send to students in class.

Students identified signals that math teachers sent that were negative to them. Even though those signals could be construed as unintentional, it suggests that math teachers should be more intentional in the signals they send to students struggling to learn math concepts. First-generation, academically and economically disadvantaged students seemed to be susceptible to the math teachers' inability to engage them in learning, whether demonstrated by disinterest or anger. Educators should explore ways that math teachers can send more positive signals to students who are struggling to learn math concepts.

2. Educational researchers should utilize signaling theory to study more issues in education.

Because signaling theory seems to apply to education, more studies should be done to explore its use in educational contexts. Therefore, it is of major importance to consider the identity of students, where they live, their socioeconomic status, and their first-generation status to further explore the signals that are influencing those students' preparation for college mathematics and college in general. Repeating the study by using a combination of signaling and other theories might help explain how signals are interpreted by students. Akerlof and Kranton (2010) have formulated a theory that introduces identity to economics. Using the theory of identity economics along with signaling theory might explain how and why students make the decisions they do about mathematics and college preparation. The theory of identity economics

may help determine who the students are and how to structure signals that would take into consideration the culture of the students and the school. In the chapter "Identity and the Economics of Education" from the book Identity Economics by Akerlof and Kranton, the authors explain this theory:

> We consider students who want to fit in with their peers, and schools that are social institutions. The identity ingredients give a new window on what makes schools effective; why school-reform programs work or fail; and why students go to school, which is what economists call the "demand for education." (p. 61)

The continuum of education can be visualized through many lenses that students rely on to make decisions about college preparation. If we want to increase the retention and completion of rural, first-generation students in community colleges, we must understand who the students are, how they prepare, and why they do not prepare, which will help educators send the signals that are the most powerful for them.

3. Research ways that rural K-12 education can send positive signals to math students residing in a rural area about their preparation for college-level math.

Rural schools have not been as prevalent in the national conversation about education as urban schools (Beeson & Strange, 2003; McArdle, 2008), and this is unfortunate. Rural institutions have unique concerns, such as poverty, scant access to services, transportation problems, and low teacher pay (McArdle). Approaching the problem of mathematics remediation through the lens of signaling brought themes to light, such as the effect of low teacher pay on mathematics instruction. Although research in rural areas has increased, knowledge is still lacking on how the education of rural students is affected by their locale.

Because the possibility arose that funding in rural areas could send signals to students about the importance of mathematics and about the importance of their success, it is an area that should be researched further. The research of Anderson and Chang (2011) has identified areas where rural students are lacking in math when compared with their urban-dwelling counterparts, such as that rural students appear to take their last math class sooner than students in other high schools. Rural students also end their mathematics studies at a

level below students in other high schools. Regarding how to improve signaling about math preparation in rural high schools, it would appear that the answer is tied to funding.

4. Conduct further research on effective strategies to help first-generation students acquire skills that would improve their ability to advocate for themselves, such as consequential thinking and assertiveness.

First-generation, academically and economically disadvantaged students have not learned how to advocate for themselves. They do not have examples in their families of how to navigate the sometimes confusing waters of higher education. In the example of the Latinas, they had additional cultural barriers that prevented them from challenging or questioning their math placement. The signals these students received were further complicated by their ethnicity. Knowing how to ask questions and respectfully represent themselves is important to their preparation for college-level math and college.

Although the focus of this study was not on ethnicity, and despite African Americans and Hispanics being represented in the sample, the theory of identity economics could be a key in diagnosing the barriers to college transition for minorities because the ethnic culture could be taken into consideration. This is also an area recommended for further research in mathematics remediation in the transition from high school to community college. Akerlof and Kranton (2010) have explored the theory of economic identity as it relates to race and minority poverty for African Americans, and they believe this theory has potential for what they term oppositional identity. This theory holds promise for increasing minority transition and completion rates in community colleges because it is built on identity, discrimination, and minority poverty.

References

Akerlof, G. A., & Kranton, R. E. (2010). *Identity economics*. Princeton, NJ: Princeton University Press.

Anderson, R. & Chang, B. (2011). Mathematics course-taking in rural high schools. *Journal of Research in Rural Education*, 26(1), 1-10.

Aud, S., Hussar, W., Planty, M., Snyder, T., Bianco, K., Fox, M. & Drake, L. (2010). *The condition of education 2010* (Report No. NCES 2010-028). Washington, DC: National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education.

Beeson, E., & Strange, M. (2003). Why rural matters 2003: The continuing need for every state to take action on rural education. *Journal of Research in Rural Education*, 18(1), 3–16.

Boswell, K. (2000). Building bridges or barriers? Public policies that facilitate or impede linkages between community colleges and local school districts. *New Directions for Community Colleges, Issue 111*, 1–12.

Bueschel, A. C. (2003). The missing link: The role of community colleges in the transitions between high school and college. In M. Kirst & A. Venezia (Eds.), From high school to college: *Improving opportunities for success in postsecondary education* (pp. 115–150). San Francisco, CA: Jossey-Bass.

Cabrera, A. F., & La Nasa, S. M. (2000, Fall). Three critical tasks America's disadvantaged face on their path to college. *New Directions for Institutional Research*, 107, 23–29.

Casazza, M., & Silverman, S. (1996). *Learning assistance and developmental education*. San Francisco, CA: Jossey-Bass.

Cohen, A. M., & Brawer, F. B. (2008). *The American community college* (5th ed.). San Francisco, CA: Jossey-Bass.

Conley, D. T. (2005). *College knowledge*. San Francisco, CA: Jossey-Bass.

Cox, R. D. (2009). *The college fear factor: How students and professors misunderstand one another*. Cambridge, MA: Harvard University Press.

Gandara, P., & Bial, D. (1999). *Paving the way to higher education: K-12 intervention programs for underrepresented youth*. National Postsecondary Education Cooperative. Washington, D.C.

Greene, T. G. (June, 2008). *Developmental education toolkit*. Community College Bridges to Opportunity Initiative, University of Texas at Austin. Retrieved from Community College Central website: http://www.stanford.edu/group/bridgeproject/policytoolkit/questionnaires_page.html. PDF

Grubb, W. N. (1999). *Honored but invisible*. New York, NY: Routledge.

Ingels, S., Dalton, B., & LoGerfo, L. (2008). *Trends among high school seniors 1972–2004*. Washington, DC: National Center for Education Statistics, U.S. Department of Education. Retrieved from http://nces.ed.gov/help/orderinfo.asp

Kearney, P., Plax, T. G., Hays, L. R., & Ivey, M. J. (1991). College teacher misbehaviors: What students don't like about what teachers say or do. *Communication Quarterly, 39*, 309–324.

King, J. (1996). *The decision to go to college: Attitudes and experiences associated with college attendance among low-income students*. New York, NY: The College Board.

Kirst, M., & Bracco K. (2004). Bridging the great divide. In M. Kirst & A. Venezia (Eds.), *From high school to college: Improving opportunities for success in postsecondary education* (pp. 1–30). San Francisco, CA: Jossey-Bass.

Kirst, M., & Venezia, A. (2004). From high school to college: *Improving opportunities for success in postsecondary education*. San Francisco, CA: Jossey-Bass.

Lutzer, D. J., Rodi, S. B., Kirkman, E. E., & Maxwell, J. W. (2005). *Statistical abstract of under-graduate programs in the mathematical sciences in the United States*. Washington, DC: National Science Foundation.

Mathematical Sciences Education Board. (1989). Everybody counts: A report to the nation on the future of mathematics education. Washington, DC: National Academies Press.

McArdle, E. (2008). Boon, not boondock: With enrollment in rural schools on the rise, will education in small-town America finally get the attention it deserves? *Ed. The Magazine of the Harvard Graduate School of Education, 52*, 16–21.

Merisotis, J. P., & Phipps, R. A. (2000). Remedial education in colleges and universities: What's really going on? *The Review of Higher Education*, 24(1), 67–85.

National Association for Developmental Education. (2006). *Welcome to the National Association for Developmental Education!* Retrieved from http://www.nade.net/

Nunley, C. R., Shartle-Galotto, M. K., & Smith, M. H. (2000). Working with schools to prepare students for college: A case study. *New Directions for Community Colleges, 111*, 59–71.

Plank, S. B., & Jordan, W. J. (2001). Effects of information, guidance, and actions on postsecondary destinations: A study of talent loss. *American Educational Research Journal, 38*(4), 947–979.

Planty, M., Hussar, W., Snyder, T., Provasnik, S., Kena, G., Dinkes,…& Kemp, J. (2008). *The condition of education 2008* (Report No. NCES 2008-031). Washington, DC: National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education.

Provasnik, S., & Planty, M. (2008). *Community colleges: Special supplement to the condition of education 2008*. Washington, DC: National Center for Education Statistics, Institution of Education Statistics, U.S. Department of Education.

Rosenbaum, J. (2001). *Beyond college for all*. New York, NY: Russell Sage Foundation.

Rosenbaum, J., Deil-Amen, R., & Person, A. (2006). *After admission*. New York, NY: Russell Sage Foundation.

Rosenbaum, J., Miller, S. R., & Krei, M. S. (1996). Gatekeeping in an era of more open gates: high school counselors' views of their influence on students' college plans. *American Journal of Education, 104*(4), 257–279.

Roueche, J. E., & Roueche, S. D. (1999). *High stakes, high performance: Making remedial education work*. Washington, DC: American Association of Community Colleges.

Spence, A. M. (1973). Job market signaling. *Quarterly Journal of Economics, 87*, 355–374.

Terenzini, P., Rendon, L., Upcraft, M., Millar, S., Allison, K., Gregg, P., & Jalomo, R. (1994). The transition to college: Diverse students, diverse stories. *Research in Higher Education, 35*(1), 57–73.

Toale, M. C. (2001). *Teacher clarity and teacher misbehaviors: Relationships with students' affective learning and teacher credibility* (Unpublished doctoral dissertation). West Virginia University, Morgantown.

Treisman, U. & Cullinane, J. (2010). *Improving developmental mathematics education in community colleges: A prospectus and early status report on the Statway Initiative*. Presented at the National Center for Postsecondary Research Conference, Teacher's College, Columbia University, New York, NY.

Venezia, A., Kirst, M., & Antonio, A. (2003). *Betraying the college dream: How disconnected K-12 and postsecondary education systems undermine student aspirations*. Washington, DC: Stanford University.

Venezia, A., Bracco, K. R., & Nodine, T. (2010). One-shot deal? Students' perceptions of assessment and course placement in California's community colleges. San Francisco, CA: WestEd. Retrieved from http://www.wested.org/cs/we/view/rs/1051

Wirt, J., Choy, S., Rooney, P., Provasnik, S., Sen, A., & Tobin, R. (2004). The condition of education 2004 (Report No. NCES 2004-077). Washington, DC: U.S. Government Printing Office: National Center for Education Statistics, Institution of Education Statistics, U.S. Department of Education.

Reflections on Being a Student Again –
A Sabbatical Project

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Abstract

Sabbatical leaves are an academic structural hallmark in institutes of higher education. In this article, a professor reflects on her sabbatical experience of becoming an undergraduate student again in a college course. The insights gained about her own teaching and learning (e.g., assessment and evaluation) from a student's perspective are discussed. In particular, the somatic aspects of experiencing life as a student are highlighted for the unique revelations about one's teaching and scholarly work they can reveal.

Introduction

The sabbatical leave is one of the hallmarks of academia at the higher education level though k-12 teachers. The practice can also be found among religious clergy and in some cases, corporations (Baruch & Hall, 2004). So, what exactly is a sabbatical in higher education? Costa (2018) "identifies a range of purposes for sabbatical: these include allowing faculty to conduct research, engage in uninterrupted study, write articles or books, enhance artistic performance and creative growth, improve teaching, course curriculum and development, complete additional education and training, and find opportunities for new experiences" (Sima, 2000 as cited in Costa, 2018, p. 66). Contrary to common belief, sabbaticals are not a "given." In many institutions, one must apply for one. While the details might differ from institution to institution, it is an agreed upon definitive period of leave that has to be "earned" and requires a defined period of prior service (e.g., teaching). There must be a formal plan for the sabbatical to be granted, a commitment to return to the institution for a certain period after the sabbatical, and a post-sabbatical report (Kang & Miller, 1999). It is not "time off" or "open/ unplanned free time" as some non-higher education people view it (though rest and renewal is often an aspect of a sabbatical). Each sabbatical is as unique as the individual applying for it, even though the broad purposes mentioned above are common elements in almost all sabbaticals.

Current Literature on Sabbaticals

In preparing to write this article, one of my sabbatical projects, I embarked on a generalized literature search using Google Scholar and a few key resources that catered to higher education, such as the *Chronicle of Higher Education*. I found many articles and resources about preparing for a sabbatical and first person, anecdotal accounts about sabbatical experiences. Conspicuously missing were empirical, theory-driven research studies about sabbaticals, such as the efficacy of sabbaticals on career progression or career satisfaction (Carraher, Crocitto & Sullivan, 2014). While my focus for this essay is not centrally concerned about institutional efficacy or even individual efficacy, the lack of research studies is interesting given the current context in which it seems nothing can escape being measured, assessed or evaluated in higher education. Personally, a study employing statistics and credible research methods was not going to be meaningful for me as I reflected on my sabbatical experience. I sought to process and share the outcomes of my sabbatical first for myself and secondly with whoever might find it useful. I guess one might be able to call this article a soft "case study" or "self-study." I say "soft" because I did not follow any of the guidelines of these qualitative research methods. I did not conduct a formal research study of my sabbatical experience because that approach was too intellectual or "too much in my head," where I spend the majority of my time, and not enough in my body. The very fact that I read, researched and wrote an article about my sabbatical automatically entails an academic dimension of my experience. Therefore, I wanted to ensure that my reflection also enabled me to honor the embodied (i.e., physical and emotional) experience of my sabbatical, which was most apparent in one sabbatical event, my experience as a "student" in a college course.

As a teacher educator, I am always interested in improving my own teaching, which naturally feeds into my research on pedagogy. During my sabbatical, I learned much about improving my teaching by reading, writing, and reflecting on various pedagogical practices. I actually read all the journal articles that had been piling up for three years and averaged one book every ten to fifteen days. However, I also knew that this was not enough. It was all too intellectual. I wanted and needed a different perspective, one that would help me *emotionally understand* and *feel* teaching from a student's perspective. What was it like to be a student? More specifically, "what might be a student experience in the classes I teach?" Again, I could theorize and intellectualize this experience. I had been a student…a long, long time ago, but these memories, honestly, were out of date.

I wondered how I might feel not abstractly, but viscerally, if I were to enroll in a real course as a student. I knew this had to be an authentic experience and that I would have to enroll in a course in which I knew little about the content. I sensed that having to struggle with the content or at least be out of my comfort zone would be more valuable pedagogically than to be in a course where I was familiar with the content. Therefore, I was very fortunate to find and be able to audit a college level introductory studio art course in drawing.

The course was offered over a winter term session, so it was a regular semester course (15 weeks) compressed into a three-week session. It was "intense." There were three hours of class a day and an expected three to four hours in the studio for daily homework. Because the content was very unfamiliar to me, I usually spent four to seven hours in the studio a day (sometimes including weekends). The last time I had taken any kind of formal art class was in high school, where I was required to do so. That was over 30 years ago. I was literally not only going into this course as a novice but also with some pre-conceived notions that I actually was not very skilled or adept at drawing. Even before the course began, I realized how my "negative baggage" and sense of self as being "poor" or "inadequate" at drawing was impacting my experience of this course over 30 years later! As a seasoned educator and mature adult, I was able to disrupt these ideas and reflect on them. I told myself to experience this class with the concept of a "beginner's mind." This was not a high stakes situation because I was auditing, and I should just focus on learning and enjoy the class.

Even before the class began, I realized I had an advantage over my undergraduate peers. Because of my deep experience as a professor, I knew how to step beyond my student persona and analyze how to address the uncomfortable aspects of being a student in a class struggling with the content. It was both intriguing intellectually and helpful emotionally to apply to myself the same pedagogical strategies I teach my students. For example, when fear and doubt about my drawing abilities started to interfere with my performance, I knew how to disrupt them with mindfulness techniques I regularly practice. I could employ self-talk to myself and reason that I am here to learn a new skill. Of course, I am going to struggle and fail! I reminded myself that improvement is born out of failure and that patience and practice leads to improvement, which will be incremental. I realized that my ability to go back and forth between teacher persona and student persona would be both an advantage and potential

liability. I needed to be in student persona while in class or the studio, so I could authentically experience *what it feels like to be a student*. Only when intentionally reflecting on my experience, did I allow myself to be in a teacher persona. Maintaining these personas in the correct situation was challenging.

To Feel Like a Struggling Student

As mentioned above, learning to draw was outside my comfort zone. However, I did not expect to struggle as much as I did, and this feeling was the most impactful and insightful aspect of the experience when reflecting about my teaching. The experience was perfect; it was everything I dreaded, needed, and wanted. For example, there were daily group critiques of our work where students were encouraged to give each other feedback. I was one of the weakest students, so I emotionally dreaded these events, but I also knew intellectually the feedback would help me improve. To be a professor and openly vulnerable as a weak student for the entire class of undergraduates to see was the experience I wanted (and needed). Needless to say, this was one aspect of the class that was transformative and humbling. Intellectually, I could reason through the fact that my very novice and clumsy drawings did not define me, but reason and logic did not stop the embodied feelings of tension, embarrassment, and anxiety I experienced. Fortunately, I was able to employ my mindfulness skills, such as slow breathing, and on the spot meditations about non-attachment and impermanence to prevent my bodily responses and emotions from overwhelming me. I was grateful for my experience, maturity, and knowledge of mindfulness.

My pre-course experience reminded me of struggling students in my past courses and the struggling students I will undoubtedly have one day. I began to think of how I could be more compassionate and empathetic towards them as I now know first-hand how they *felt*. Their suffering was not an intellectual concept or abstraction but a physical and emotional embodiment that I realistically felt which allowed me to empathize with them.

Observer Effect

While I was a student, it is difficult to know how my presence as a professor changed or affected the class. Interestingly, there is scant literature about professors assuming the role of students in the immersive way I did, but there are two resources which addressed this issue. In one situation, two professors, unknown to the rest of the undergraduate class, posed as students in an online

class (Parry, 2009). The purpose of their presence was "to increase learning" by posing questions and interacting in online discussions. The results were mixed, with the most notable outcome being the questionable ethics of engaging in such a practice. Another study conducted by an ethnographic researcher involved posing as a student and applying for admission to a college, living in the residence halls, and attending classes. Through subterfuge, the researcher, a cultural anthropologist, not only directly experienced what it feels like to be a student but also observed directly what students say, think, and act when not in the formal and professional setting of a classroom (Nathan, 2009). Again, the reactions were mixed as to whether the findings were worth the lack of transparency to students.

In my case, the students knew on the first day that I was a "visiting professor on sabbatical wanting to learn to draw and to re-experience what it feels like to be a student." With respect to the professor, I was extremely conscious of my role as a guest; I did not want to interfere with how the professor taught the course. For example, I always made sure I was last to procure materials to ensure all students had what they required. During critiques or class discussions, I always held back and gave students space and time to contribute before I might offer a comment. The point was for the students to engage not me. Sometimes, I would offer a comment that students could build on, but I definitely always remembered that I was an auditor. Significantly, by not contributing to a class discussion, I noticed "wait time," a concept of giving students enough time to respond to questions asked by a teacher (Rowe, 1986; Llamo, 2018) and thought about my own classes with respect to this issue.

One other obvious possibility in which my presence might have influenced the class was when I directly asked students for feedback or help. (The professor avidly encouraged us to give each other feedback). At first, I could sense that students were tentative and intimidated. It is not often that a professor is asking for their help. However, as they came to know me, they became much more comfortable in approaching me for feedback and vice versa. This was such a refreshing and comfortable experience. In education the notion of teacher as learner and learner as teacher (Freire, 1970; hooks, 1994) is often bandied about; in this case, there was virtually no power differential except for my title as a professor, but I was not assessing or grading them. Simply being able to exchange views on equal footing as peer students was inspiring. Because I struggled with the content, I always learned more from my peers than I could

offer them, and they truly helped me improve my drawing skills. A revelation from this experience is that one need not be an "expert" to help others. True, the students were more competent with the content than I was, but they were also learning and novices to drawing too. I recognized that even novice students could offer something of worth, though they are still learning, and was reminded of the value of reciprocal learning (Carter, 1997). I will note that often I framed my requests for feedback very specifically, such as pointing to a part of my drawing and asking, "What do you think about this line? Its quality?" I didn't just ask, "What do you think of my work?" Often I asked them how they achieved a specific technique, such as foreshortening or proper proportioning. In other words, I modeled effective ways of both soliciting and providing feedback. By having to break down a concept of skill and help me, several students remarked how they better understood the skill. Perhaps the cliché, "the best way to learn something is to teach it" can be true.

Revising and Re-envisioning my Teaching

Each day after class, I reflected on my experiences in a daily journal. When the class concluded, I reviewed my journal entries and noticed several themes that emerged from my reflections, which I will use as the organizational device to discuss how they helped me re-envision my teaching. These three themes are 1) Community Building, 2) The Art of Providing Feedback: Assessment and Evaluation, and 3) Practicing What You Teach (and Preach)

Community Building

Because of the intensity of the course and so many hours spent both in class and out of class in the studio, the professor from the first day explicitly encouraged all the students to talk with each other, ask each other for help and learn from one another. He ensured we knew each other's names on the first day though ice-breaking activities and during work sessions would have different students help each other. Students had access to the art studio 24/7, so there were many opportunities work with others.

It was clear, however, that seeking out each other as we progressed in our work was not just about building community and making students feel comfortable, it reflected a much deeper cultural tradition of how artists work; they often collaborate and receive feedback. Very often, artists are so involved with their own work, they "cannot see the forest for the trees." A fresh set of eyes of another viewer can spot details that artists simply cannot see in their own work.

Because I teach writing, I also employ a similar method when students write drafts; they peer workshop their drafts and give feedback to one another (Boud, Cohen & Sampson, 2014). This well researched pedagogy helps students learn to depend on someone besides the professor or teacher to learn to revise their papers. When the professor felt we were becoming myopic and too focused on our own work during class sessions, he would stop us and make us walk around and look at each other's work (in progress). This "break" was invariably needed, refreshing, and informative. It encouraged us to ask questions about the shared common assignment.

Another way in which the professor intentionally built community among us was to encourage us to seek the advice of more senior art students in advanced classes, who were always in the studio late at night. Because they had taken this class at some point, they intimately understood our challenges and misunderstandings. As a teacher, I appreciated this informal mentoring, and it reminded me of how great master artists always mentored younger artists and had apprentices (National Gallery of Art, 2020).

While I am very intentional about community building in my own teaching, this experience both validated and pushed me to think of fresh ways to build community among students and perhaps differently for different classes. The studio aspect of the class prompted me to think of how students could collaborate outside of class on assignments, not group projects necessarily, but rather help each other with their individual assignments.

The Art of Providing Feedback: Assessment and Evaluation

Perhaps the one common element among all college/university courses around the country, no matter the level or discipline, is that they all have an assessment and evaluation component. For the sake of definition, I am using the technical definition of assessment and evaluation where assessment is feedback for improved performance and evaluation is the value judgement evaluating the performance, such as a rating or grade (Chappuis, Stiggins, Chappuis & Arter, 2012). An art course was a very interesting class to take with respect to assessment and evaluation, and my experience helped me rethink the assessment systems I use in my own courses.

To begin with, the course relied heavily on formative assessment, the daily feedback from the professor and other students. While work was graded and

we knew the criteria for excellence or lack thereof for each assignment, it felt like the assessment was more along the lines of coaching. As mentioned above, there were daily critique sessions. The professor would have all the students post their work; then after a quick glance at all the work, he would throw out some general questions and let the students respond by referring to their own work. He would build on their observations and then make connections to patterns or other concepts that he wanted to highlight. For example, he might ask, "What was the most challenging aspect of last night's assignment?" Almost invariably, students would cite a challenge in completing their assignments that was shared by fellow peers. The professor would build on their response, and it would give him an opportunity to address a specific skill or concept.

I found this approach very empowering because it enabled the students to self-assess their own work and turned over the responsibility of assessment and improvement back to the students. If, of course, there was something glaring we all overlooked, the professor would gently steer us towards that item. Formative assessment in a public venue can be nerve-racking, a point not missed by the professor, who always reminded us of the need for a "thick skin." Interestingly, he never needed to instruct the students in being kind. Students were naturally inclined towards kindness. I am not sure if this was because they knew that on any day they might be on the receiving end of a critique and/or because the professor modeled how to give honest but kind feedback.

The professor also provided much formative assessment at the individual level. While we were working at our easels, the professor would circulate around the studio and give feedback to individual students tailored to their unique needs. When necessary, he would demonstrate a technique or help them correct a detail on the spot. It was this gentle but specific feedback both during group critiques and at my easel that enabled me to improve, albeit it slowly.

My knowledge and skills improved significantly in three weeks with this continuous feedback. This is not to say I did A level work, it simply meant I progressed quite far from when I entered the course. The fact that I did not reach A level work was humbling and insightful. It reminded me that no matter how much one might practice, high standards are not always attained in the timeframe of a course. I noticed that it took me quite a bit longer to master some of the kinesthetic skills, such as how much pressure to use while drawing

with charcoal, than my fellow students. I was viscerally reminded that students learn at tremendously different rates, and it made me rethink how we evaluate (grade) students given this situation.

Evaluation or grading can ruin a student's experience of a course depending on how it is implemented. I realized that auditing the class and not receiving grades, just feedback, enabled me to focus on improving my drawing abilities and allowed me to *enjoy* the class and the process of learning. I am sure that if I was being graded, even if the grade didn't mean anything, I would have felt stressed. Because I didn't have to worry about being graded, I sometimes skipped an assignment to redo one that was particularly challenging. Because skills built on one another, *I had this luxury to slow down*. My fellow peers did not have this advantage. They noted that they knew this class was outside their comfort zone and previous experiences with drawing were not successful. Because they had to take the class, they chose a pass/fail option, so their grade point average would not be impacted. I asked them how this affected their experience of the class, and all of them said it was much less stressful, and they could focus on the assignments and learning. I also noticed that all of them still worked hard and turned in all assignments. Attendance was also very high. Because they were taking it pass/fail, these students had a lot of leeway not to give 100%; however, they seemed to be enjoying themselves and the progress they were making. I also wonder if the public critique sessions added a sense of accountability because everyone had to participate in this event regardless of the grading system used. Students taking the course pass/fail reminded me of how students can be intrinsically motivated to learn for the sake of learning and the joy of it. The professor must establish the right conditions in the form of continuous feedback and visible and concrete improvement by the student.

This experience really made me think hard about my own assessment and evaluation system. I cannot offer my course as a pass/fail course, but I could select various assignments as pass/fail assignments, where they would not quantitatively count towards a student's final grade. I have long been aware of the deleterious emotional and academic effects of grading (Covington, von Hoene & Voge, 2017). As my experience demonstrated, no matter how many hours I was in the studio, I was never going to produce A level work in three weeks, six weeks, or possibly an entire semester! This dreaming was immaterial. The stakes were not high for me, but that is not the case for many

students. An abundance of research as demonstrated that when students feel safe emotionally, they perform better academically (Bucker, Nuraydin, Simonsmeier, Schneider & Luhmann, 2018; Pasi, 2001). If I can mitigate one of the academic stressors in my students' lives, grading, I am confident they will not only perform better academically but also be happier.

Feeling like a Struggling Student

The fact that learning to draw was outside my comfort zone is an understatement. As mentioned earlier, the vulnerability and emotional dread I felt during group critiques were visceral, direct and real. I was transported immediately back to elementary and middle school where I not only struggled with art but also math. I was flabbergasted at how powerful negativity and fear could be. Not only was I reminded of my weakness in art but also math, a completely unrelated field. At the same time, this emotionally painful experience was invaluable and "perfect." To be a professor and feel openly vulnerable as a weak student in front of an entire class of undergraduates was ultimately the precise learning experience I wanted (and needed).

Naturally, this experience made me reflect on aspects of my own teaching and course content. I wondered about the silent struggling students in my classes. Because of my continuous assessment system, I rarely miss a struggling student, but I usually only considered how to help them raise their grade. I rarely thought about how they *felt*. I wondered how I could be more compassionate and empathetic towards them with respect to the emotional aspects of their learning. I don't want their suffering to be only an intellectual concept or abstraction. I knew that empathizing the physical and emotional embodiment of their suffering would somehow better enable me to help them if not simply better understand them. Because struggling students often display a strong front, I wondered how I could learn how they really feel. Another outcome of this experience was a decision to share my sabbatical experience as a student with my students. In this way, they will know that we all struggle, even their professors.

The Art of Practicing What You Teach (and Preach)

The professor who taught my drawing class is a professional artist and has been teaching for almost 30 years. He not only had two exhibits of his work while the class was in session but could also discuss the business aspects of buying and selling art. His expertise and passion were evident and contagious.

Sometimes a great artist is not always an adept teacher, and there are art teachers who do not create their own art. We all know that individuals who are gifted with a certain talent or craft, whether it be art, writing, math, chemistry, physics, etc., sometimes cannot teach what they practice. They simply cannot break it down in a way that is comprehensible to novices. Conversely, there are art teachers who only create art when they are teaching.

In an ideal world, it makes all the difference for a practicing artist to be also a wonderful art educator, and I saw this in the professor who taught this class. In my situation, I saw a parallel. I love to teach writing, so the fact that I have gone through the process of getting articles published (and rejected) and am working on a second book proposal, gives me some "street credibility" when I discuss writing. I practice the craft I teach. As a teacher educator, I feel it is crucial that I not just discuss and have students read about "best pedagogical practices" but that I am able to model and implement them in college courses and in K-12 schools. The fact that my teaching has been recognized and awarded inspires confidence in my students (potential teachers) that I know my content. The point is that this course experience made me realize the importance of professors who not only teach their discipline, but who practice, "preach," and are passionate about it. The embodied experience of *practicing* one's craft enables professors to understand intuitively the challenges and nuances of enacting a skill, applying a concept, solving a problem, etc. For example, during drawing demonstrations, the professor would demonstrate common errors, explain how and why they occur, and, just as importantly, how to correct them. He did not just draw something ideally but wanted us to experience the trial and error of an artist. In my case, as an English/language arts teacher educator, this experience reminded me of why showing my students drafts of my writing is so necessary. They need to see that I don't get it right the first, second, third, or even fourth time. My students need to see me as a writer *and* as a writing teacher, not just a professor teaching about writing or teaching about teaching.

Re-imagining my Scholarly Work

My scholarly work and research are mainly centered on mindfulness and contemplative pedagogy in the context of teacher education. Mainly, my work consists of writing articles and presenting at conferences and workshops on these topics. Drawing, however, opened up new avenues for me to consider. First, I thoroughly enjoyed the kinesthetic aspect of drawing. My

final assignment took me nine hours, and I often worked three or four hours straight, which felt like an hour. In fact, I often spent at least two hours on each assignment. There was a meditative quality to drawing that aligned well with the mindfulness practices I teach. I began to explore how drawing or other artistic pursuits might be part of my mindfulness work. Secondly, drawing revealed an entirely new avenue of potential expression for me and possibly my students. Instead of having students always provide verbal (either oral or written) responses, why not have them draw as a possible response to an assignment? I realized that I had been avoiding drawing in my courses because I was afraid. I am now rethinking how I can bring this mode of expression into my courses and study the outcomes.

Renewing my Professional and Personal Life

Becoming a college student again for three weeks was one of the highlights of my sabbatical. For all the reasons discussed above, the experience was rich. However, beyond the teaching, research and sabbatical requirements, it was simply a renewing experience. I am always learning when not on sabbatical but almost exclusively about my discipline. I most often read and write about topics related to my teaching and research. It was a gift to learn a topic completely unrelated to my field but be able to bring to bear all the strategies of my discipline that could make me a successful student. After the class ended, I continued to draw. I now had a road map to go back and practice various assignments. While this was a professional experience, I have incorporated drawing into my personal life and combined it with my daily journaling practice.

Conclusion

Embodying and thereby understanding *both* intellectually and emotionally the deeply human (i.e., emotions, values, feelings, etc.) aspects of teaching and learning could not have been achieved with a purely empirical formal research approach whereby I quantitatively and/or qualitatively analyzed my experiences. This is not to say that such an approach does not have its merits but "measuring" or quantifying my emotional responses to my experiences would have distracted me from simply experiencing them as they arose. I could have engaged in a formal qualitative "self-study" approach (LaBoskey, 2004), but again, it would have placed me too much in my head intellectually. There will be plenty of opportunities to employ such an approach in another situation. I wanted to be able to reflect in the moment, to sit with, experience, and observe the internal landscape of my feelings, the somatic, cognitive, and

emotional responses to my experience (Moss, Hirshberg, Flook & Graue, 2018) as a student unencumbered by any kind of research protocol or consideration. Because the internal world of a teacher is often studied in an analytical and formal manner (if at all), I wanted to experience an entirely different approach to being a student to see what might be revealed.

In short, I reveled in not being able to predict or necessarily anticipate what I learned emotionally and cognitively from my experience. The unexpected and sometimes surprising outcomes I experienced were renewing and refreshing. Often when employing a research approach there is a sense or predicted anticipation about what the outcomes might be. In my experience of being a student, I really had little preconception of what to expect, even though I was familiar with the roles, traditions, and workings of academia, most recently as a professor. The freshness or beginner's disposition I was able to bring to the experience of being a student enabled me to take away insights I might otherwise have overlooked, ignored, or discounted.

References

Baruch, Y. and Hall, D. (2004). The academic career: A model for future careers in other sectors? *Journal of Vocational Behavior*, 64 (2), 241-262.

Boud, D., Cohen, R., Sampson, J. (Eds.). (2014). *Peer learning in higher education: Learning from and with each other*. New York, NY: Routledge.

Bucker, S., Nuraydin, S., Simonsmeier, B., Schneider, M. & Luhmann, M. (2018). Subjective well-being and academic achievement: A meta-analysis. *Journal of Research in Personality, 74*, (83-94).

Carraher, S., Crocitto, M., Sullivan, S. (2014). A kaleidoscope career perspective on faculty sabbaticals. *Career Development International, 19*(3), (295-333). DOI 10.1108/CDI-04-2013-0051.

Carter, C. (1997). Why reciprocal teaching. *Educational Leadership, 56* (6), 64-68.

Chappuis, J., Stiggins, R., Chappuis, S. & Arter, J. (2012). *Classroom assessment for student learning: Doing it right-using it well*. Upper Saddle River, NJ: Pearson

Costa, L. (2018). Sabbatical as sacred time: Contemplative practice and meaning in the neoliberal academy. *The Journal of Contemplative Inquiry, 5*(1), 65-85.

Covington, M., von Hoene, L., & Voge, D. (2017). *Life beyond grades: Designing college courses to promote intrinsic motivation*. New York, NY: Cambridge University Press.

Freire, P. (1970). *Pedagogy of the oppressed*. Great Falls, MT: Winston Press (formerly Seabury Press).

Hooks, b. (1994). *Teaching to transgress: Education as the practice of freedom*. New York, NY: Routledge.

Kang, B. & Miller, M. (1999). An overview of the sabbatical leave in higher education: A synopsis of the literature base. ERIC (430 471). Retrieved from https://www.researchgate.net/publication/234657401_An_Overview_of_the_Sabbatical_Leave_in_Higher_Education_A_Synopsis_of_the_Literature_Base.

LaBoskey, V. (2004). The methodology of self-study and its theoretical underpinnings. In Loughran, J., Hamilton, M., Laboskey, V. & Russell, T. (Eds.), *International Handbook of Self-Study of Teaching and Teacher Education Practices* (817-869).

Lhamo, J. (2018). Contemplative wait time: Pausing to cultivate compassion in the classroom. In J. Dalton, E. Dorman & K. Byrnes (Eds.), *The teaching self: Contemplative practices, pedagogy, and research in education* (pp. 49-57).

Moss, E., Hirshberg, M., Flook, L and Graue, M. (2018). Cultivating reflecting teaching practice through mindfulness. In E. Dorman, K. Byrnes & Dalton (Eds.), *Impacting teaching and learning: Contemplative practices, pedagogy, and research in education* (pp. 29-39).

Nathan, R. (2006). *My freshman year: What a professor learned by becoming a student*. Cornell Press: Ithaca, NY.

National Gallery of Art (2020, February 20). The making of an artist.   http://www.italianrenaissanceresources.com/units/unit-3/essays/training-and-practice/

Parry, M. (2009). Online professors pose as students to encourage real learning. *Chronicle of Higher Education, 55* (38), A10. Retrieved: https://www.chronicle.com/article/Online-Professors-Pose-as/44274#comments-anchor

Pasi, R. (2001). *Higher expectations: Promoting social emotional learning and academic achievement in your school*. New York, NY: Teacher College Press.

Rowe, M. (1986) Wait time: Slowing down may be a way of Speeding up! *Journal of Teacher Education, 37* (1), 43-50.

Sima, C. (2000). The role and benefits of the sabbatical leave in faculty development and satisfaction. In L. S. Hagedorn (Ed.), *What contributes to job satisfaction among faculty and staff?* (pp. 67-75). New Directions for Institutional Research. San Francisco, CA: Jossey-Bass Publishers.