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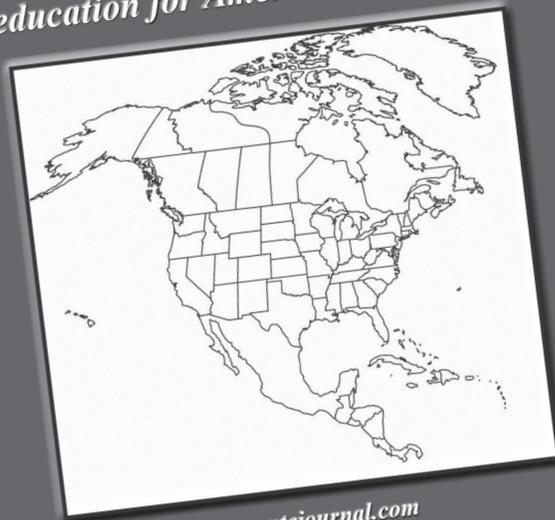
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Mediation and Pediatric Chronic Pain Clinic Collaboration to Address Truancy

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Steven Weisman
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Abstract: Truancy is a complex problem that significantly affects students and their families. This case series was conducted to convey some of the difficulties associated with truancy as well as the outcome of collaboration between a mediation center that works with students with truancy problems and a pediatric chronic pain clinic. Clients were referred to the pain clinic by the mediation center to explore chronic pain as a cause of truancy. The case series portrays three clients who were referred to the pain clinic and the outcome of the collaboration. The examples demonstrate the complexity of truancy as well as the benefits of active collaboration between the mediation center and a pediatric medical specialty clinic.

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Agree to Succeed Program ©2005WCS

Keywords: truancy, school avoidance, mediation, pediatric, pain, restorative justice

INTRODUCTION

Absenteeism plagues many schools and school districts across the United States. Underlying issues pertaining to chronic absenteeism frequently go unaddressed, unnoticed, or avoided entirely. All too often, the process of discipline or referral for chronic absenteeism moves away from the school system and moves toward the judicial system. Thus, our juvenile system is frequently inundated with cases pertaining to chronic school avoidance and the associated fallout that comes from children being absent from school.

Rather than moving chronic absenteeism cases out of school administrators' control, alternative methods

should be explored. This particular case series outlines the positive effects of collaboration between a pediatric pain clinic and the Wisconsin Community Services, Inc. Community Mediation Program, "Agree to Succeed" (ATS). The ATS program is funded by the United Way in Waukesha and Milwaukee County Helping Kids Succeed Initiative and various school districts dealing with chronic absenteeism. The primary goal of ATS is to identify underlying reasons and causes why certain students are chronically absent or school avoidant. From this information a Family Action Plan was developed to give the family, the student, and the school goals to improve attendance. ATS established contacts and resources for the students to take advantage of in order to effectively manage the underlying issues affecting

the absenteeism. This particular case series analyzes situations in which a student and the student's family were referred to the Children's Hospital of Wisconsin Pediatric Chronic Pain Program (referred to as Pain Clinic) by ATS in order to address underlying medical concerns potentially affecting the student's truancy.

This article highlights the benefits of an integrated intervention model for youth with pain and truancy, and shows ways we can optimize opportunities to improve the lives of students and their families. Multi-program/multi discipline collaboration affords increased insight into contributing factors and intervention models. This case series demonstrates the clinical significance of intervention and collaboration between ATS and the Pain Clinic in treating clients with chronic truancy and pain.

BACKGROUND

Little research has been conducted specifically relating to children with pain and truancy concerns; however the literature shows that pain, especially chronic pain, has been strongly linked to school avoidance (Gorodzynsky, Hainsworth, & Weisman, 2011; Kearney & Spear, 2012). Mediation is a process used in a variety of legal and non-legal settings. In some cases, mediation is used to resolve truancy issues, and can be court-ordered or voluntary. For example, The Supreme Court of Ohio has collaborated with the Ohio Commission on Dispute Resolution and Conflict Management in order to develop a program called Truancy Prevention through Mediation. Through this program, mediators are appointed to elementary students and the student's family in order to better address the underlying issues causing school absenteeism. A professionally trained mediator engages the family in dialog regarding possible reasons for the school absenteeism, as well as possible solutions to the problem (Kearney & Spear, 2012). Although the effectiveness of mediation to address truancy has not been fully explored in a research setting, anecdotally, mediation effectively addresses individual circumstances which can be helpful in establishing a plan for regular school attendance. Many school districts across the country use mediation in order to address truancy and this type of intervention tends to be more effective than going through court proceedings. Lindstadt (2005) has outlined the advantages to mediation when addressing truancy as opposed to utilizing the court system. The neutral mediators work to address the student's needs as well as the expectations of the school in a private setting. Research has shown that multidisciplinary approaches to addressing pain are effective (Hechler et al., 2010). Multidisciplinary pain programs assess and treat

medical, psychological and social factors affecting pain and functioning. Children who have pain, particularly chronic pain, miss significant amounts of school (Gorodzynsky, Hainsworth, & Weisman, 2011). Anxiety and school stress often affect pain and coping. Pain team members routinely work with school personnel to develop accommodation plans to support the student while at school (Ladwig & Khan, 2007). Collaborative efforts in the past have been effective; though not much research has been published in this area. This case review will show the effectiveness of collaboration with a mediation program and pediatric chronic pain specialists, with the common goal of getting a child back to school on a regular basis. Mediation helps by both addressing the pain as well as non-medical circumstances surrounding the child's reasons for truancy.

CASES

Case One

Patient A was in the 9th grade. Mediation intervention began after A had missed sixty-five or more full days of school and was earning lower grades. Patient A suffered from headaches and back and leg pain. The patient regularly fought with mom to stay home from school in the mornings because of the migraines.

The Helping Kids team (ATS) referred A to the Pain Clinic to establish a pain management plan. During the pain team assessment, A reported being the victim of bullying at school for several years and had always struggled with a peer group. A had a history of depression and anxiety, panic attacks, suicidal thoughts, and history of cutting behavior and was being treated by a psychiatrist and a psychotherapist. A did report social anxiety and frequently worried that others were judging A's looks.

The Pain Clinic did believe pain, anxiety, depression, and school avoidant dynamics were contributing to A's pain, and discussed this with mother and A. The pain team spoke with mother and A about symptoms of school avoidance, explained the rationale for its development, and outlined the treatment plan. The pain team made medication adjustments to psychotropic and analgesic medications, ordered physical therapy and recommended continued work with the psychotherapist and the psychiatrist. The pain team recommended A to engage in cognitive-behavioral therapy as well as stress reduction therapies and techniques. The team encouraged good sleep hygiene, adequate nutrition, exercise and hydration. The team set the expectation for daily school

attendance and having medications available at school. The team communicated with the school validating the pain problem and requested supportive accommodations. Mediation interventions included an initial meeting with the parents and one mediation held at the school. At least five face to face follow up meetings were held with the family following the mediation meetings. These meetings were meant to offer specific support to the family to deal with their particular concerns. Many meetings were with the mother alone to offer support. Numerous phone calls were made to the home. The ATS staff met with the student at school to discuss school issues and home issues and possibilities to offer hope for the future. ATS staff assessed that the student struggled with low self-esteem. Related to this point, the family could not afford school clothing due to financial stressors. ATS obtained Goodwill vouchers that were given to the student to buy school clothes so the student would feel more comfortable at school. Mother and A attended classes recommended by ATS to learn about stress management and controlling anger. These classes helped the parent and the child to repair their relationship. After an 11 month period, A's attendance improved to being present at school 95% of the time. Patient A reported still having headaches, but learned to cope with them. The student reported improved mood and less anxiety. A continued to meet with the psychotherapist as needed.

Case Two

Patient B was a 14-year-old in 8th grade. Mediation intervention began after the student was tardy thirty or more days to school in the mornings and tardy fifteen times or more to classes during the school days. There seemed to be difficulty arranging transportation to school due to poor communication between B's divorced parents. The ATS team discovered abdominal pain was contributing to B's attendance problems. B was referred to the Pain Clinic to establish a pain management plan. However, the mother was hesitant to initially attend the Children's Hospital Program until she felt comfortable and trusting of the ATS staff.

During the Pain Clinic intake, the mother reported that since grade school, B had a long-standing history of abdominal pain that resulted in absenteeism. Also, B reported long-standing difficulties with reading comprehension and retention and math. B had a full class schedule with no study halls. B could get B's and A's in some classes, but failed English, math, and science. When explored further, B reported that when feeling behind, B felt anxious and overwhelmed, which exacerbated the abdominal pain and led to absenteeism. Based on the Pain Clinic evaluation, several factors

seemed to be contributing to B's difficulties with school attendance, including pain, anxiety, mother's work hours, and a possible learning disability. As a result, a school avoidance pattern had developed that contributed to B's abdominal pain and functional disability.

When asked what B thought would help for next year, B identified needing one or two study halls, help in math, and having mother home in the mornings. B agreed that daily school attendance was required. Although B displayed insight into the dynamics of the pain and school avoidance, the team was uncertain of B's motivation and ability to follow through and believed B needed a forcing function to ensure school attendance on a daily basis. B was open to continuing to work with ATS.

The Pain Clinic recommendations included daily school attendance, continued involvement with ATS to help the mother with behavioral intervention, evaluation for possible learning disability, development of a school plan to meet B's needs, and psychotherapy to learn cognitive behavioral techniques for pain and stress management. The team encouraged good sleep, hygiene, adequate nutrition, exercise, and hydration.

B returned to the pain clinic three times. B met with the pain clinic mental health provider, but did not want to learn relaxation techniques. Appointments focused on problem solving to improve functioning. The team communicated with the school guidance counselor regarding pain team evaluation and recommendations. B's course load was reduced and B was provided access to a resource teacher. The mother did set up neuropsychological testing, and changed her work hours so she was home in the morning. School was still difficult for B, but B was receiving extra help.

Mediation interventions included two mandatory initial meetings with the parents. At least five face to face follow up meetings were held with the family following the mediation. The meetings with the student were to discuss ideas to help improve the student's attendance and to just check in on issues of concern. ATS assessed that there was immense emotional stress within the home contributing to the student's chronic pain. The program provided support information for the mother to attend local support groups to learn about stress management. This allowed the mother to become more comfortable with dealing with emotional stress, which resulted in less pain for the student. In addition, ATS assessed that the student did not have a proper daily routine within the home and a daily schedule; a proper sleep schedule was developed for the student. The mother was encouraged to reach out to other community resources (parenting

classes and family counseling), which she also did.

It was discovered through meetings with the parent and student that the student struggled academically. The mother was overjoyed that the Pain Clinic was able to determine that B had a different learning style than most students. This unique learning style frustrated B causing B to dislike school and was the reason B was frequently tardy. As a result, ATS found a tutor to work on missed assignments, allowing the student to make-up lost credits.

As a result of the Family Action Plan and the ATS intervention, over the course of 11 months, B's overall situation improved: B attended summer school to earn credits to graduate on time, school staff adjusted B's class schedule by putting B in classes more suited for B, a tutor helped B get caught up classes, and parents communicated better regarding transportation to and from school. The headaches and abdominal pain subsided and B's attendance improved to attending school 100% of the time.

Case Three

Patient C was a freshman in high school and had missed over 60 full days of school and over 30 partial days of school. Parental lack of enforcement of school attendance was identified as a contributing factor. The mediation team collaborated with the pain team for their assessment and recommendations. The Pain Clinic supported their involvement and identified school avoidance as a major contributor to pain and functional impairment.

Patient C had been seen in the Pain Clinic for several years for chronic migraine headaches and poor school attendance. School avoidance dynamics were believed to be contributing to C's pain and poor functioning. Multiple family financial and relational stresses were also felt to be contributing. Treatment included medication trials for C's headaches, extensive work with the school to develop a 504 plan, education and counseling with parents about the interplay of pain and school avoidance in escalating pain and disability, and strong encouragement to enforce daily school attendance. The pain team provided cognitive-behavioral therapy for pain and stress management. Despite these efforts, C's headache severity, school attendance and parental follow through fluctuated. The father was frustrated with the situation, but did not seem very motivated to act on treatment recommendations. C began being treated by a psychiatrist for attention deficit disorder. C was acting out at home, not following curfew and refusing to attend

school. Anxiety and depression symptoms developed, but the family did not follow through with recommendations for treatment. C began using marijuana. The pain team attempted to enroll C in a community wrap around program, but that was not successful. Referral to a psychiatric day treatment program was discussed.

ATS had two mandatory initial meetings with the family, and an additional 8 face-to-face meetings between the family and the mediation team. As a result of the Family Action Plan that was developed, additional steps taken to increase attendance included working with C's father to enforce proper structure within the household, including proper bed time. The father worked many hours during the week and was not home for the student in the mornings. ATS encouraged the father to lessen his work load so that he could be home in the mornings with his child.

The mother and father were divorced and did not properly communicate with each other about who would take the child to school each day. ATS encouraged the parents to take parenting classes that helped them to communicate better with each other.

The school worked with C to accommodate C in terms of class schedule. The school day was shortened for C and C was allowed to attend summer school in order to make up lost credits. Additionally, C was provided a tutor to catch up on missed school work. C identified being told in one of the meetings with the ATS staff that the alternative to attending school was juvenile detention and this was a motivating force to get C back to school. Outcomes over the 11-month collaboration resulted in a 75% school attendance rate following the initial visit to the Pain Clinic.

DISCUSSION

Extensive school absenteeism is a common problem for school administrators, teachers, families and communities. All too often, the process of discipline or referral moves away from the school system and moves toward the judicial system. This process results in escalation of an already difficult situation, and takes the power away from administrators and teachers. The result is that the situation is then not handled by those who have the student's best interests in mind. Penalizing a difficult/complex situation almost never "fixes" it. Despite this, chronic absenteeism must be addressed. Students who miss a lot of school are more likely to become socially isolated, suffer academically, and are significantly more likely to become delinquent. Thus, our juvenile system

is frequently inundated with cases pertaining to chronic school avoidance and the associated fallout that comes from children being absent from school.

These cases illustrate that each student/family's situation is too complex to be handled in a superficial manner. They also illustrate how simple school absences can easily spiral into chronic absenteeism. As with other difficult societal issues, chronic absenteeism cannot be dealt with using a "band-aid" approach. A significant amount of time and energy must be invested, so as to treat the multiple underlying components of the situation for the student and his/her family. In each of these case examples, the school and family benefited from the private interaction of an impartial mediator. The mediator was able to take the time needed to identify underlying components, match community resources to each component, and help the student reengage with the school.

Across the three cases, students missed from 60-65 days of school at the time of referral to the Pain Clinic. ATS worked with each student and their family from 25-47 hours over an 11-month period. Pain problems included abdominal pain and headaches. The pain team members identified psychosocial factors affecting the pain experience including parental beliefs and behaviors, school avoidance, bullying, anxiety, and learning difficulties. One similarity across these cases was the underlying poor family structure and communication. The ATS interventions included working with parents on communication, behavioral interventions, schedule regulation, and working with school staff.

CONCLUSION

These cases highlight the benefits of collaboration between a pediatric pain center and a mediation team for students and families. Given the critical importance of school attendance, and the complexity of chronic school absenteeism, it is important to fully unveil the components underlying chronic absenteeism, and to address them using appropriate resources. Despite the complexity that too commonly characterizes such cases, it is clear that all students benefited from the time investment and tailored interventions. In conclusion, community mediation services, in collaboration with appropriate specialties (such as the pain center in these cases) and school administrators can help children avoid getting tangled in the judicial system.

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Problem Based Learning: A Viable School Counseling Intervention to Promote Student Engagement with At-Risk High School Students

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Abstract: Problem Based Learning (PBL) is a pedagogical approach rooted in social constructivism. PBL merges an individual's social and developmental interests in order to make learning relevant and meaningful. While PBL has been adopted worldwide by many educators, it has yet to be significantly researched, let alone adopted by school counselors, who are also in the educational environment. This paper introduces PBL as a conceptual framework for systematic classroom guidance lessons with at-risk high school students.

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Keywords: Problem Based Learning, Student Engagement, School Counseling, At-Risk

INTRODUCTION

Educators, school counselors, and policy makers are challenged by the complexity of the education crisis facing our nation. This challenge is played out quite strikingly in schools on a daily basis in the struggle teachers and school counselors face as they strive to engage all students. The challenge can be especially difficult with those students who seem most reluctant to learn, those who are at-risk of failing or leaving school before graduation, and those who face various obstacles in completing a high school education. Empirical research supports the position that dropping out of school is not a one-time event but a progression of events that begin early in a student's life and with warning signs evident

early in a student's school career (Balfanz, Herzog, & Mac Iver, 2007; Pinkus, 2008). The research also reveals that the factors which influence student disengagement are multidimensional and include individual, family, and institutional factors (Rumberger, 2004). According to the report from the director for the High School Survey of Student Engagement (Yazzie-Mintz, 2007/2008), the most noticeable responses of students across the country as to reasons for their disengagement and eventual dropout fell into three categories: (1) school dislike, (2) irrelevancy of school work, and (3) teacher dislike. These responses clearly demonstrate that issues related to school climate, adult relationships, and relevant and real-world connections for school assignments can influence student engagement.

STUDENT ENGAGEMENT

In recent times the term student engagement has been frequently associated with the education challenges facing the United States (Balfanz, et al., 2007; Janosz, Archambault, Morizot, & Pagani, 2008). Several researchers have suggested that individual, family, community, and school factors influence student disengagement and ultimately school dropout (Hawkins, Catalano, & Miller, 1992; Rumberger, 2004). Just as there are multiple factors which keep students engaged, there are conversely multiple factors that influence disengagement (Balfanz et al., 2007; Pinkus, 2008).

Bridgeland, Dilulio, and Morison (2006) conducted a study in which students who dropped out reported feeling a sense of alienation from school as early as one to three years prior to deciding to drop out. Among the commonly identified individual characteristics of school dropouts is student disengagement. Students who are alienated and disengaged from school are much more likely to drop out (Alexander, Entwisle, & Horsey, 1997; Rumberger, 2004) and face issues including substance use and abuse, teenage pregnancy, and criminal activity (Caraway, Tucker, Reinke, & Hall, 2003).

ADULT RELATIONSHIPS AND STUDENT ENGAGEMENT

Positive adult relationships in the school setting are among the key ingredients necessary actively engaging students in their learning processes and helping to engender positive academic attitudes and a spirit of perseverance. Studies show that students with caring and supportive interpersonal relationships in school report more positive academic attitudes and values and more satisfaction with school (Klem & Connell, 2004). These students also are more engaged academically (Klem & Connell, 2004).

The importance of the relationship between engagement and achievement is not unique to the educational setting. Yazzie-Mintz (2010) made note of a corporate model of engagement “in which strong relationships — between employee and organization, employee and employer, employee and customer, and employee and work — create productive and profitable businesses in which employees remain with their companies” (p. 1) and suggested that by looking at the corporate model from the educational perspective, one could see that “student engagement has promise as a driving force in creating high-achieving schools in which students persist through graduation” (p. 1).

Teachers and counselors are key players in fostering student engagement (Akey, 2006; Garcia-Reid, Reid, & Peterson, 2005). They work directly with students and typically are the most influential in a student’s educational experience. Teachers and counselors must work to create a culture of achievement in their classroom by developing relevant minds-on, hands-on lessons. They must also promote a supportive environment that highlights student strengths, cultural backgrounds, and prior learning experiences. In a 2009 study of high school engagement, results revealed that students felt most supported by teachers (85%) and counselors (75%) among all the adults in their school system (Yazzie-Mintz, 2010).

HIGHLY EFFECTIVE SCHOOL COUNSELORS AND STUDENT ENGAGEMENT

Highly effective teachers and counselors are individuals who demonstrate willingness and openness to improving and utilizing instructional materials and pedagogy relevant to the needs of 21st century students and to promoting individual student strengths. As these adults engage in promoting and supporting the strengths, skills, and abilities of students, students begin to experience a sense of belonging and community which serves as a protective factor in student engagement (Akos & Galassi, 2007).

Given the nature of their position as well as their professional training, school counselors are key partners in creating and maintaining a school environment that promotes educational equity and positive adult relationships to increase levels of engagement for all its students and particularly for at-risk students. School counselors impact the lives of students, parents, colleagues, and other stakeholders in the local community and beyond. They influence students by providing opportunities for access to empirically-based and data-driven programs and strategies, thus improving student achievement and success.

One such approach is Problem Based Learning (PBL), a teaching approach that started in the 1960s with McMaster’s University in Canada. Since that time many higher education and high schools have adopted PBL in some form or another based on the numerous benefits it can provide (Barrows & Tamblyn, 1980). Despite PBL’s relatively fast growth in higher education programs, high schools are growing at a slower pace in the adoption of this teaching approach due to the emphasis placed on accountability in high schools. In spite of the slower

growth in high school settings, a growing interest in using PBL with high school students is reflected by a marked increase in articles in the education literature. However, a review of the literature resulted in only two articles which linked PBL and school counseling (Hall, 2006; Hall, 2003). The review did not reveal any articles integrating theory and research for the purposes of best-practice recommendations for school counselors using PBL.

The relative paucity of research and theory-based articles centering on school counselors and PBL impelled the study of this topic. Hence, the primary purpose of this paper is to explore the integration of a well-researched pedagogical approach such as PBL (Barrows & Tamblyn, 1980; Delisle, 1997; Hall, 2003; Lambros, 2004; Torp & Sage, 2002; Vernon & Blake, 1993), with school counseling interventions targeted to disengaged students. The authors will explore PBL as a school counseling intervention and its impact on student engagement in the struggle to improve the U.S. high school graduation rate. The authors will discuss PBL within a constructivist framework as it relates to student engagement, the role of the school counselor, and implications for utilizing PBL.

PROBLEM BASED LEARNING (PBL)

Understanding PBL requires not only defining it as a pedagogical approach, but developing an awareness of the roles of the participants, the connection between PBL and constructivism, characteristics of the learning environment, and the application of PBL principles.

PBL DEFINED

PBL as an instructional approach is collaborative, active, participatory, and hands-on (Lambros, 2004; Hmelo-Silver & Barrows, 2006; Torp & Sage, 2002). It is student-centered in nature; relevant, real-world, and ill-structured by design; and applies standards and competencies developmentally (Hmelo-Silver, 2004; Semerci, 2005). PBL is a teaching model as well as a process model that typically follows a particular course. At the foundation of PBL is an ill-structured, relevant, real-world problem. Small groups of students are given a PBL problem to resolve. As these students work together to identify questions, concerns, issues, and problems that need to be resolved through the process of inquiry, reflection, and discussion, they gain knowledge in and out of their academic content areas along with practice using affective and life skills, such as negotiation and problem solving.

CONSTRUCTIVISM AND PBL

Problem based learning is rooted in constructivism, a theory used to explain how people know what they know and how people learn (Smith, 1993; Torp & Sage, 2002). One of the basic premises of constructivism is problem solving, at the center of which is learning, thinking, and development (Applefield, Huber, & Moallem, 2000). Many counseling and instructional approaches are outgrowths of constructivism; thus, one would observe some shared elements such as collaboration, problem or case-based learning, and student/client centered instruction (Bertolino & O'Hanlon, 2002).

THE PBL LEARNER

Learners in a student-centered learning environment, such as that seen in PBL, are involved in the construction of knowledge through active, collaborative social interactions. As their interest is piqued so is the level of their engagement and motivation to learn. As a result, focus ceases to be an issue in the classroom. The PBL learner becomes more actively involved in their own learning as a result of being directly engaged in the process. Characteristically, PBL learners are asked to put their knowledge to use by critically thinking about what is being learned and subsequently reflecting on what was learned (Bereiter & Scardamalia, 1989).

While going through the process of solving a PBL problem, learners (formerly known as students) are learning as they work. They are learning to be critical and competent consumers of information which they gather from across disciplines and original sources. They are learning to take theory and make it practical and real. They are learning to experience in the classroom a semblance of what they will experience in the real world. They are becoming prepared for life in the real world. As active and critical problem solvers, they are guided by elements of the problem as well as by the facilitation (Ahlfeldt, Mehta & Sellnow, 2005). Within their small groups, the tasks learners choose are usually tied to some prior knowledge and/or experience within their background and cultural context which makes their learning more real, relevant, and engaging (Koschmann, Myers, Feltovich, & Barrows, 1994).

A PBL learner must make a cognitive and emotional shift from being taught with traditional teaching approaches and step into this constructivist *minds-on, hands-on*, approach where they are now in charge of the learning process. Actively engaging in the process of learning requires the learner to design and plan ways to try out

their ideas, not always expecting to be told what to do. They plan ways to verify, extend, confirm, or discard ideas and they carry out activities by using materials and by observing, evaluating and recording information (Brownstein, 2001; Derry, 1999). A major component of the PBL process in which each learner must participate is the *learner as reporter* role in which they use a variety of ways to share the knowledge they gained with others. Consequently, they report this knowledge through journals, drawing, reports, graphing, oral presentations, and technology displays (Ertmer & Simons, 2006).

PBL LEARNING ENVIRONMENTS

Based on pure observational data, a constructivist classroom/environment is arranged in a manner that not only creates a climate for collaborative work, but communicates the teaching philosophy and interaction expectations of the instructor. Constructivist learning environments facilitate the engagement of learners in knowledge construction through collaborative activities that embed learning in meaningful contexts and through reflection on what has been learned through conversation with other learners (Applefield, et al., 2000). So depending on the desired interactions and outcomes the school counselor expects, he/she will set up the PBL classroom to facilitate those interactions and outcomes (Goodnough, Perusse, & Erford, 2011).

In addition to classroom collaborative learning, a PBL classroom extends outside of the physical classroom. Learning can take place in a computer lab, library, in the community, home, and other places that are natural to the problem. As learners proceed through this experience they interact with things, people, and places that are relevant to the construction of knowledge and solving the specific problem. Therefore, learners gain an added benefit in not only what they know, but in becoming more engaged in the process of *how they come to know*.

THE PBL FACILITATOR

As a co-structor of an engaged, student-centered environment, the PBL facilitator (formerly known as teacher, instructor, and sage on stage) is no longer an individual who imparts knowledge to students, but is now a co-structor of student learning. The facilitator's role can be described as one in which he/she has a working understanding of the learner's perspective, context, and background, and supports what the learner already knows in order to accomplish desired learning

outcomes (Schuh, 2003). The facilitator's role is critical to making PBL work well.

The PBL facilitator is an expert learner and must be able to model good strategies for learning, reflecting, and thinking, rather than serve as an expert in the content itself (Hmelo-Silver, 2004). Additionally, this person must be able to move the learners through the various stages of PBL and the group process. The facilitator models the problem solving, collaboration skills, and self-directed learning processes (Hmelo-Silver & Barrows, 2003).

Another skill the PBL facilitator must be able to master is facilitation. This skill involves asking the right questions at the right time. It also involves knowing when to *push* the learners and when to *pull back* thus creating appropriate challenges at the appropriate learning levels. Part of facilitation is monitoring students' progress, checking to see if students are staying on-task or not, and being intuitive enough to understand when the PBL process is stalled or stalling (Hmelo-Silver, 2004).

The facilitator in a PBL environment will not have a sedentary experience. The facilitator continuously and purposefully monitors, assesses, and guides the learner groups as they move in, out, and in between groups of actively collaborating learners. This intentional activity conveys that (1) learners' contributions are valuable and critical to the process and (2) the facilitator is accessible, approachable, and a co-structor of knowledge with the learner. The students have greater access to the facilitator and the facilitator is more engaged with students and their learning (Ertmer & Simons, 2006).

Overall, the goal of the PBL facilitator is to actively and intentionally create an engaging learning environment where learners are encouraged to use their reality and prior knowledge in constructing solutions to relevant, ill-structured problems. The facilitator continuously monitors the group work, guides, assesses, and stretches the minds of the learners through questions and discussions.

THE ROLE OF THE PBL PROBLEM

PBL problems are central to the effectiveness of the PBL process and outcomes (Barrows, 2000). The starting point for any PBL problem is a problem, puzzle, or query. The problem must be ill-structured, messy, and relevant; based in the real-world; and developmentally appropriate while containing curriculum standards and reflecting student backgrounds and contexts (Barrows,

2000; Hmelo-Silver & Barrows, 2006; Lambros, 2004). Furthermore, the problem should be structured in such a way that it elicits multiple complex solutions and not one-step answers or solutions. A good PBL problem should take into consideration the characteristics of students and how they learn best. Additionally, the facilitator must be skilled in the process of inquiry, discussion, and facilitation and be able to model those skills to allow students to learn and use them (Delisle, 1997; Hmelo-Silver & Barrows, 2006; Torp & Sage, 2002). The creation of a problem is central to the effectiveness of the PBL process and learning outcomes.

ASSESSMENT OF PBL EXPERIENCES

Critical thinking skills require that students' products or solutions be examined, not so much for whether they are right or wrong, but to determine a myriad of skills, strengths, and weaknesses observed and learned throughout the PBL process. This assessment takes place both throughout the PBL process and at the conclusion of the learning activity by the students themselves, their peers, facilitators, and others relevant to the problem (Holt & Willard-Holt, 2000).

HIGH SCHOOL COUNSELORS, PBL, AND STUDENT ENGAGEMENT

School counselors can and should be among the caring and supportive adults who can promote relationships with all students in high schools. These relationships are critical to the academic, career, social, and personal development of high school students. As a vehicle to systematically move these relationships and concepts along, the American School Counselor Association (ASCA) states that school counselors are to design and deliver comprehensive programs which promote student achievement (ASCA, 2005) while also serving as advocates who believe every student is capable of graduating from high school ready to succeed in college and/or a career (Education Trust, 2009).

In an effort to minimize or remove the distinct pedagogical and affective disconnect experienced by many 21st century students, the transformed school counselor must work in collaboration with the rest of the educational team to provide relevant, supportive, pedagogically sound, and research-based prevention/intervention strategies. The national model for school counseling practice suggests several methods such as individual and small group appraisal and advisement,

individual and small group counseling, consultation, peer facilitation, and classroom guidance instruction (ASCA, 2005) by which information can be delivered to high school students. In addition, school counseling researchers have recognized and recommended the need for more extensive research and development in the area of effective guidance curriculum materials that meet student needs and correspond to the ASCA competencies and standards (Whiston & Quinby, 2011).

GUIDANCE CURRICULUM

One of the effective methods for delivering school counseling programs is by way of guidance curriculum (Borders & Drury, 1992). Gysbers and Henderson (2006) have suggested that school counselors incorporate guidance lessons into their school counseling programs and ensure that students are participating in those on a daily basis. ASCA (2005) defines the guidance curriculum as structured and systematic lessons designed to assist all students in achieving the desired guidance competencies and to provide them with developmentally appropriate knowledge and skills.

ASCA and the Transformed School Counseling Initiative (TSCI) school counseling models promote and support collaboration and classroom guidance lessons. School counselors in counselor education programs are trained to design and implement classroom guidance lessons and small groups. Given the training and expertise that school counselors have in regard to group counseling and guidance lesson delivery, it seems that using the PBL approach would be a smooth transition to guidance lesson delivery.

IMPLICATIONS FOR SCHOOL COUNSELORS

In general, constructivists believe that learning is a social process which takes place within a context. Furthermore, they believe individuals construct knowledge and skills actively, and as they problem solve, they discover the consequences of their actions through a reflective process which engages them in social interactions with the world, people, and things (Brooks & Brooks, 1999; Brown & King, 2000). Since the inception of PBL in the early 1960s, proponents have lauded and documented the benefits that come with using this active, collaborative, and student centered approach among students in a variety of disciplines at different age levels and in different content areas (Savery, 2006).

It is time for school counselors to look outside the field of school counseling for effective, research-based pedagogical approaches and integrate those appropriately into the delivery of comprehensive school counseling programs. The transformed school counselor includes classroom guidance as part of the services they provide to all high school students. In preparing these guidance lessons, school counselors have the opportunity to collaborate with teachers who have more training in curriculum design and planning. As part of the education team, school counselors are poised to reach out to all stakeholders, especially as they work collaboratively to implement PBL.

BENEFITS OF USING PBL IN SCHOOL COUNSELING

PBL is one of many constructivist-based instructional approaches designed to promote and support more engaged learning. As school counselors become more involved in student achievement, they can utilize PBL as a pedagogical approach with guidance lessons. According to Ravitz (2010), PBL promotes academic rigor while promoting affective life skills such as critical thinking, collaboration, communication, and resourcefulness. In addition, the use of PBL increases motivation for learning, retention of information, and the learner's ability to apply their knowledge across various disciplines and life situations (Brown & Campione, 1990; Jonassen, Davidson, Collins, Campbell & Haag, 1995; Ravitz, 2010). PBL is student centered, which gives students the opportunity to be responsible for their learning. From a counseling perspective this encourages students to focus on their strengths and learn from each other's strengths, thus building confidence (Carr & Jitendra, 2000). It creates a climate where students can reflect on their successes and build self-confidence. As learners problem solve, leadership skills develop and they are forced to have an open mind and see things from other people's perspectives (Semerci, 2005). Also, as students' confidence increases, their motivation increases and this in turn increases the likelihood of them staying in school and seeking post-secondary training (Correa & Repetto, 1996; Mann, 1987). According to Achilles and Hoover (1996), PBL improved classroom behavior and achievement and made learning experiences more exciting at both elementary and secondary grade levels.

In the current climate of high stakes accountability for all educators, including school counselors, it is critical that school counselors have confidence in effective and research-based methodologies to work with all

students to help them graduate from high school and make a successful transition from school to work and/or college. The traditional teacher-centered/counselor-centered lecture and work-sheets approach is limited in its ability to produce an abundance of problem-solvers and high school graduates (Bell, 2010; Semerci, 2005). We as practitioners and counselor educators must build a bridge to create a connection between students' worlds and what is being required for their educational access and success.

CONCLUSION

As school counselors continue to acknowledge the uniqueness of each student's prior learning as an important factor in continued learning, they must also consider numerous other factors. They must consider the bottom line of the school setting, which is student achievement. They must ensure they are making substantial and relevant contributions to the goal of student's with equitable opportunities for educational access and success. School counselors and the school counseling programs must become known in their work settings as being relevant and central to the mission of facilitating high achievement levels for all students and as those with valuable interventions for high school students at risk for dropping out. School counselors must use their training and expertise to bridge the gap between students and staff; students and pedagogy; and students and learning. School counselors must resolve to be the caring and relevant adults in students' lives—those who promote engagement and success. Adopting PBL as a school counseling intervention can be a bridge to help connect students to learning and eventually to graduation.

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Professional Growth of Teacher Candidates and C-BAM

Kim L. Creasy
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Abstract: Teacher preparation programs seek to instill in their teacher candidate's professional dispositions that will carry forward into their professional careers. One element providing evidence of the acquisition of professionalism is how quickly teacher candidates begin to seek and fulfill responsibilities in the classroom of their student teaching placements. Once teacher candidates acclimate to their setting during student teaching, the rate of acquiring the responsibilities of a classroom varies. All teacher candidates included in this study were from one teacher preparatory institution that is part of a state-wide system. Cooperating teachers matched with teacher candidates were tenured faculty with prior experience in serving as mentors to teacher candidates. Using Loucks and Hall's (1979) Concerns-Based Adoption Model (C-BAM), this study analyzed teacher candidates' reflective journals. The reflective journal themes of the teacher candidates matched to the C-BAM, indicated that these teacher candidates were developing as teaching professionals.

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Keywords: professional dispositions, teacher candidate, reflective journaling, concerns-based adoption model, teacher preparation, C-BAM

INTRODUCTION

A question emerging from teacher preparation institutions is whether their teacher candidates are successfully transitioning from novice to professional. Research has shown that, traditional teacher education programs have a need to demonstrate that their teacher candidates are being successful in acquiring the dispositions of a professional educator (Abdal-Haqq, 1998; Darling-Hammond, 1994; Petrie, 1995; Valli, Cooper, & Frankes, 1997). Additionally, teacher preparation programs have a responsibility to produce teachers possessing confidence and self-efficacy in teaching (Abdal-Haqq, 1998). Literature also suggests that teacher candidates who show evidence of acquisition of professional dispositions during the student teaching placements are more likely to use the results of reflection to adapt their instruction and pedagogical practices based on the classroom situation.

This study investigated the reflective journals of teacher candidates when compared and contrasted to Loucks

and Hall's (1979) Concerns-Based Adoption Model (C-BAM) which was developed as a framework for understanding and managing change in people. This examination of reflective journals was completed to gain an understanding of the effect of student teaching experiences on teacher candidates' perceptions of their planning, instructional methodologies, effectiveness of instruction, assessment of students' learning, and classroom management techniques.

Classroom teachers and teacher preparation institutions have identified a gap between research and practice in measuring the level of professional dispositions. Teachers and university personnel in school settings seek to build the bridges that allow schools and universities to benefit from this mutual relationship. The professionalism of teacher candidates is related to the ability of this relationship to be mutually beneficial. In contemporary debates on the quality of teacher preparation programs, the acquisition of professional dispositions has been identified as an essential component of quality models of teacher preparation (Book, 1996).

HISTORICAL PERSPECTIVE

Partnerships between public schools and teacher education institutions have existed in many forms since the later part of the nineteenth century (Stallings & Kowalski, 1990). John Dewey, the American educational philosopher who established the intellectual foundation for the progressive education movement, opened a “laboratory school” at the University of Chicago in 1896. Dewey’s school, following the influence of Francis W. Parker’s practice school (Campbell, 1967) and the medical training model developed by Flexner (1910) focusing on clinical experience, stressed experimentation to test his theories and their sociological implications. In 1904, when Dewey left the University of Chicago for Teachers College, Columbia University, the laboratory school “had become the most interesting experimental venture in American education; indeed there were those who insist that there has been nothing since to match it in excitement, quality, and contribution” (Gutek, 1997). The laboratory school movement expanded and contracted from those beginnings until the mid-1970s.

Tomorrow’s Teachers, the Holmes Group report (1986) brought about not only the development of the concept of the Professional Development School (PDS), but an awareness of the emphasis needing to be focuses on the development of professional dispositions. The Holmes Group view has been that a teacher preparation institution must provide a program and placements in field settings where novice teachers can learn while also allowing for continual research and professional development (Hooks & Randolph, 2004). The concept of immersing teacher candidates in school-based experiences was founded on the medical training model developed by Flexner (1910) in the early part of the 20th century. This model utilized John Dewey’s belief that individuals need experience and practice in order to develop understanding. With Dewey’s (1904/1974) theory as a template, Flexner implemented his medical training model focusing on clinical experience as a method of learning.

MacNaughton and Johns (1993) suggest that the field experiences for teacher candidates are evolutionarily a descendant of the laboratory school, due in part to the ongoing efforts to connect university and school teacher preparatory measures

FIELD EXPERIENCES

In a field experience setting, teacher candidates have a placement where they have the opportunity to gain an understanding of the culture of the school setting. They can become well acquainted not only with their cooperating teacher, but also with faculty members, administrators, office personnel, and the custodial staff. In this placement, teacher candidates learn a variety of school rules and procedures during their acclimation to this setting. This practice in teacher preparation is a part of the professionalization of teaching (Darling-Hammond, 1994).

Once acclimated to the student teaching setting, teacher candidates are then better able to work collaboratively with cooperating teachers and with other teacher candidates to provide students with deeper and richer educational activities (Berg, Grisham, Jacobs, & Mathison, 2000).

Current teacher preparation models typically start with classes on theory followed by practical experiences (Russell, 1998). Russell believes that teacher training should begin and end with practical experiences that provide teacher candidates with opportunities to connect theory taught in college/university courses to field experiences while facilitating the development of professional dispositions. In his model, the university becomes a place to build “on experiences in a broad range of ways, from swapping experiences to reinterpreting them and assembling resources to meet goals identified through experience” (p. 53).

Loucks and Hall (1979) developed a framework for examining the process of change. This Concerns-Based Adoption Model (C-BAM) is a tool for continually evaluating the acquisition of responsibilities and professionalism in new settings. The C-BAM holds that when people experiencing change, such as teacher candidates immersed in a school setting, there is an evolution in the types of questions they ask and in their use of whatever the change is. In general, early questions and concerns are more centered on self. As teacher candidates become acclimated to their surroundings and more experienced, questions and concerns emerge that are more task oriented. Finally, when self and task concerns are for the most part resolved, the individuals experiencing change and growth can focus on their impact on others in this setting. Clearly, these changes in perception of the student teaching placement and the responsibilities related to this experience align with Charlotte Danielson’s Framework for Teaching – Domain 4 addressing professional responsibilities.

REFLECTIVE JOURNALING

Teacher candidate reflective journals, according to the literature, focus on self-perceptions of efficacy and readiness to teach. Several studies (Abdal-Haqq, 1998; Darling-Hammond, 1994; Petrie, 1995; Valli, Cooper, & Frankes, 1997) use surveys and reflective journals to illuminate changes in the student teaching experiences while some examine expertise, dispositions, and retention.

Runyan, Parks, and Sagehorn (2000) adapted a needs assessment questionnaire to compare developmental stages of teacher candidates including their professional dispositions. Researchers found that teacher candidates were more aware of their need to develop skills necessary for sound teaching practices. This practice of reflection was an emphasis of Dewey (1936). He believed that learning takes place when teacher candidates have the opportunity to try out new behaviors and reflect on them. Kolb (1984) describes a learning model that is grounded in experience. Teacher candidates actively reflect on their experience to develop concepts and switched action by setting new goals and strategies for their teaching. The cycle then repeats itself. During this reflective process, supervisors act as mentors, guides, and observers of the process to ensure that the teacher candidates engage in personal reflection and planning. However, learning is in the hands of the teacher candidates. Using this model changes the university supervisor/teacher candidate relationship from authoritarian to cooperative, guided by the candidate's reflections and aided by the supervisor's questioning and observations. This alteration of the supervisory relationship is essential in demonstrating the growth of the teacher candidate as a professional.

Cruikshank (1987) stated that, "students of teaching..." reflect on the act of teaching and become, in practice, more thoughtful, wiser teachers. They deliberate on their teaching methods rather than base decisions in planning on technique, impulse, tradition, or authority. The act of reflecting is more than bringing something to mind. Cruikshank (1987) continued by saying, "Teaching can be thought about and considered by means of meditation, musing, contemplation, pondering, deliberation, cogitation, reasoning, and speculation" (p. 82). Valverde (1982) places the topic in the form of a question, "What am I doing and why?" Moore (1979) insisted that the "theoretical teacher does what she does with a purpose" (p. 4). Valverde (1982) added that, "reflection should be formative that is, periodic, constructive and deliberate" (p. 48).

The opportunity to have reflections of teaching practices

is suggested by Wait and Warren (2001), utilizing the North Carolina Teacher Performance Appraisal instrument, to have contributed to improved rankings of educators in the first three years of teaching, particularly in the area of student behavioral management.

This research focused on the growth of professional dispositions in teacher candidates as measured by their reflective journals. Degrees of growth were analyzed in terms of depth of involvement/responsibility and rapidity of acquiring these responsibilities.

METHODOLOGY

In this study, reflective journals of 10 teacher candidates were analyzed to assess the development of common themes in teacher candidate reflections. This examination of reflective journals was completed to gain an understanding of teacher candidates' constructs of planning, instructional methodologies, effectiveness of instruction, assessment of students' learning, and classroom management techniques as they indicate the procurement of professional dispositions. The researchers determined that the submissions provided by teacher candidates from these journals did correspond with identified keywords. These constructs were compared and contrasted to The Concerns-Based Adoption Model (Loucks & Hall, 1979) that identifies the themes of change as being: awareness, informational, personal, management, consequence, collaboration, and refocusing.

Each student journal reflection submitted was examined and paralleled with the Concerns-Based Adoption Model (C-BAM) themes. The researchers compiled words that corresponded with each theme (awareness, informational, personal, management, consequence, collaboration, and refocusing) and based the examination off of those words.

ANALYSIS

Awareness was examined by looking for descriptive words regarding the classroom, the student's population, the school itself, etc. Awareness is regarding the teacher candidate not being concerned about anything when the journal was written. This could be the student teacher writing about classroom size, their first impression of the cooperating teacher, where the school is located, etc. During the first week of reflections, one teacher candidate wrote, "The first part of my first day was spent at the high school with the entire district. We had breakfast and had our ID's made then went into the

auditorium for meetings and skits until noon.” This statement is in regards to what the teacher candidate was actually doing. No observations were made about the students, the school, the teachers, etc. This was strictly an awareness of what was going on around the student teacher candidate and showed there were no concerns during this entry.

In regards to the *informational* aspect of the C-BAM, this would be the student teacher stating further information but also asking questions or wanting to know more about a certain aspect in the classroom. For example, one student teacher wrote, “I am having one problem with a little guy who doesn’t quite respect me yet. I wanted some advice on how I could take action that very minute...do you have any advice?” This teacher candidate also asked, “How do I make the half hour seem less like a circus and more like I am in control?” This teacher candidate shows a very real struggle for most teacher candidates: dealing with a disruptive student in the classroom. The student teacher asks for help, which is showing their want for more information.

The *personal* aspect is in regards to how something in the school will affect the student teacher. A candidate wrote, “I learned I need to work on closing a lesson before moving onto the next activity.” This student teacher is focused on what he/she needs to do in order to strengthen their teaching ability. The researcher looked for words such as “affected me,” “personally,” “I feel,” etc. Another student teacher wrote, “I taught the math lesson, which went really well. I’m noticing that I am doing some of the things that I did in my practicum that I really need to change, like calling on the same people that always volunteer answers.” This student teacher is showing their need for personal growth and is acknowledging that they need to work on something personally.

Management moves into how a teacher candidate is being affected by getting materials ready and feeling like they are only working on classroom management. In the original Concerns-Based Adoption Model (C-BAM) the words “classroom management” were not involved but the student teachers used this term so often that the researcher felt this aspect of teaching should be included. Words like “classroom management,” “materials,” and “preparing” were used in determining this aspect of the Concerns-Based Adoption Scale. “Classroom management is something that I feel I never really got taught how to do so it has been great to have the entire class to myself...so I can practice that management on my own.” This was stated by a teacher candidate who was concerned with classroom management and getting materials ready. The student teacher further stated their

concern with getting materials ready and “planning everything for the week.”

The *consequences* aspect of the C-BAM is concerned with how the lesson or teaching style is affecting the student population and how the teacher can refine his/her skills to cater to more learners. Words that stood out to the researcher were: affected, progression, distraction, performance, sick day, assembly, lesson plan, etc. Many teacher candidates touched on circumstances that affected the students and how they were affected. This could have been due to an assembly, a break coming up, students fighting with one another, substitute teachers, etc. One student wrote, “My cooperating teacher was out sick one day so she had me teaching the entire day.... there were several students that just lost it without my cooperating teacher there, which was frustrating.” The student continued with, “There have been some entertaining lessons and the students seem to be really retaining the information.” This shows the teacher candidates awareness of her students and how her teaching affected the student’s ability to learn and cooperate.

Moving into the part of C-BAM that focuses on the “we,” *collaboration* has to do with the student teacher relating what they are doing to what others are doing. Words like “worked with,” “development day,” “teacher work day,” “collaborated,” etc. were looked for in reflections in regards to collaboration. A student teacher wrote, “This week my cooperating teacher and I had a rough week with students. We are currently trying to come up with ideas on how to manage a few students who are disrupting class time for everyone else.” This shows the partnership between the student teacher and cooperating teacher. This type of collaboration is necessary in the teaching field and expected of the student teachers.

Lastly, *refocusing* is the furthering of ideas and knowledge. When the teacher candidate thinks, “I have some ideas that might work better,” this is when the student teacher is refocused and taking the next and final step in the C-BAM model. Words associated with refocusing were: instead, future, differently, etc. A teacher candidate stated,

I am in another very chatty class of students this semester. They’ve already lost an entire recess and they only get one 15-minute recess a day. I’m not sure if I agree with taking away recess time. I feel like they need this time to decompress and get out some energy. However, I’m not sure of an alternate solution when I have my own class. I’m going to have to dig out my PE course notes to see what some suggestions are.

Another student teacher touched on recess time and their idea to help student's behave more appropriately, I also wish these kids got more than one recess during the day. I think they need at least one more break during the day, but because of how the reading and writing curriculum is organized there just isn't any time. I believe they would be better behaved if they had another break.

Both examples of entries that student teachers wrote show their refocusing skills and their ideas for their future classrooms. In order to be a successful teacher, there are many skills one must practice and learn, refocusing being one of them.

After months of investigation, the researcher identified certain factors that affected student progression throughout the semester. A major factor was the student teacher's relationship with the cooperating teacher including whether the student teacher figured out their role in the classroom. Whether the student teacher was able to deal with change and how their flexibility changed over the semester was another factor that affected progression. Other factors included: the willingness of school administration to allow student teacher to explore, classroom management skills and whether they improved, stayed the same, or declined, and the student's freedom to teach lessons and observe various teachers in the school. All of these factors work together to develop competent and confident teachers.

The previously stated student progression factors determined how the student teachers developed. Although each teacher candidate was unique in their field experience and reflections, common themes did

arise between all candidates. First of all, the first week of teaching was purely informational and all student teachers showed awareness. As expected, the first week of school is not about subject matter or actual teaching experience, the student teachers are getting used to the classroom, adapting to a new environment, and learning new names and faces. The student teachers were not aware that their journals were being evaluated, thus the students only providing minimal information at times. Another common development among teacher candidates was in regards to classroom management. At some point in the semester, each student teacher struggled with classroom management and had questions as to how to monitor student's better. Lastly, each student teacher observed felt more comfortable as the semester went on in terms of presenting lessons, working with cooperating teachers, and thinking about how students were affected in terms of their learning experience.

As the semester progressed, student teacher's became more confident and responsible for all aspects of instruction. This was displayed in their journals. During the first week, the average rating for the journal entries of the nine student teachers observed was 0.5. The following week, that rating rose to a 2. Later on in week five, the rating was 3. Moving to the end of the semester, week twelve had an average rating of 4. The second to last week, week thirteen, had an average rating of 5.5. This clearly shows the steady progression of student teachers growth as professionals. Although the teacher candidates did not know the researcher was rating their journal entries, student teachers showed a significant increase in their knowledge and skills and dispositions as professionals.

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Are We Making Our Social Justice Framework Salient? Candidates' Perceptions of Urban Teacher Education Program Effectiveness

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Abstract: This study investigated the effectiveness of the social justice framework of our urban teacher education programs from the perspective of the teacher candidates. Overall, candidates perceived a program to be successful in preparing them to: creating engaging learning communities, catering to needs of individual learners, and respecting diverse beliefs and cultures. Results indicated that programs' effectiveness differed, with ECE programs ranking highest for showing strong coherence between coursework and fieldwork, and focusing on meeting needs of diverse students. Findings underscored the importance of program coherence, cohorts and learning communities, and open communication among all stakeholders to prepare candidates for high-needs schools. The importance of exploring variation in approaches to social justice across different programs within colleges of education is also highlighted.

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Keywords: teacher education, program evaluation, social justice curriculum, surveys, preservice teachers' perceptions, program coherence

In the era of accountability when teacher education programs are being held responsible for effectiveness of graduates, an important question to ask is, "have they learned what we taught them?" (Diez, 2010, p.442). Programs must successfully complete the accreditation processes, incorporate state and national standards, fulfill their institution's established goals, beliefs and values, and demonstrate that candidates have learned what is expected of practicing teachers.

An institution's vision and organizing framework typically include conceptions of teaching and learning with corresponding outcomes on which candidates are assessed (Diez, 2010; Zeichner, 2005). Our urban teacher education college developed a framework focused on

learning to teach for social justice and equity. Although social justice is ubiquitous in teacher education, the specific factors of program design and delivery that can either empower or impair the effectiveness of a social justice curriculum is not prevalent in the literature. While a social justice framework undergirds teacher preparation at our institution, our 35 initial preparation programs may vary in the ways in which this curriculum is emphasized. The purpose of this study was to examine candidates' ratings of teacher preparation programs in our college in their effectiveness in emphasizing the social justice framework, and to understand design and delivery features that contributed to program's effectiveness.

BACKGROUND FOR THE STUDY

Standards and learning outcomes are integral to the design of most teacher preparation programs; however, when standards are introduced for accountability purposes, outcomes may be limited to documentation of compliance (Kornfeld, Grady, Marker, & Ruddell, 2007; Peck, Gallucci, & Sloan, 2010). In such instances, candidates could fulfill course requirements without the standards impacting their practices (Diez, 2010). In contrast, when outcomes are directly associated with faculty members' conceptualizations of teaching and with program design, the underlying framework can contribute to program effectiveness (Zeichner, 2005).

For theoretical and conceptual underpinnings to effectively frame teacher preparation, consistency must be apparent between program design and faculty beliefs. Teacher educators have advocated program evaluation as an effective tool to examine consistency between practice and beliefs (Berry, 2004; Loughran, 2006). Adding the perspectives of teacher candidates and graduates to evaluation studies offers invaluable insights (Zeichner, 2005). Candidates' perceptions of programs can be very different from faculty intentions (Korthagen, Loughran & Russell, 2006) and can have significant implications for program design and delivery. Researchers focusing on candidates' perspectives have explored issues such as: (a) opportunities to apply theory to practice, (b) effectiveness of content and pedagogy courses, (c) coherence among aspects of preparation, and (d) feedback about program strengths and weaknesses (Berry, 2004; Grossman, Hammerness, McDonald & Ronfeldt, 2008; Korthagen, et al., 2006). Although candidates usually rank field experiences and student teaching as the most powerful aspects of teacher education (Wilson, Floden, & Ferrini-Mundy, 2001); their overall satisfaction with programs can be impacted by factors such as: connections between theory and practice, support from faculty and administrators, clear and open communication, etc. (Grossman et al., 2008 ; Hammerness, 2006).

This study was conducted in a large urban research university in a southeastern metropolitan area. Consistent with our university's mission, our education faculty developed a social justice framework grounded in research on effective educator preparation for urban contexts. Faculty articulated a vision of a world where social justice, democratic ideals, and equal opportunity can be enacted and three guiding principles and ten learning outcomes (Appendix A) consistent with this vision.

In the first guiding principle, faculty emphasized the need to prepare informed candidates who critically examine theory, inquiry, and practice to make well-reasoned, data-based decisions about teaching, learning, and development (Darling-Hammond & Bransford, 2005; Feiman-Nemser, 2001); and who are empowered in pursuit of social justice and equity (King, 2006). The second guiding principle emphasized that candidates would be respectful of all learners and committed to the belief that all people can learn (Delpit, 1995; Gay, 2010); and be ethical, knowledgeable, and caring advocates for students and families (Noddings, 2002). The third guiding principle stressed candidates would be engaged with learners, families, schools, and local and global communities (Lieberman & Pointer Mace, 2010), and consider dynamic interactions between learners and educators within socio-cultural contexts (Bronfenbrenner, 1986).

Emphasis on the ten learning outcomes and guiding principles is expected to be apparent in course syllabi and infused throughout programs. Programs provide explicit opportunities for self-reflection and challenging notions of color blindness, deficit conceptions and low expectations for minority students, while examining systemic barriers and the role of teachers in challenging the status quo (Milner, 2010).

Our college partners with schools across a large metropolitan area, a majority of which are high-needs (more than 50% free-reduced lunch/60 % minority enrollment). All programs provide opportunities to engage with local communities, through activities such as: service learning projects, drawing on local funds of knowledge, school and community collaborations, parent literacy nights, family math nights, and tutoring programs, etc. These out-of-class transformative learning experiences challenge candidates and enable disruption of hegemonic understandings regarding diverse students (Milner, 2010; Schaffer, 2011). In addition through the support of a Teacher Quality Partnership (TQP) grant, the college collaborates with 35 professional development schools (PDS) for site-based teaching and co-teaching. PDS cooperating teachers are invited to professional learning seminars on campus during the summer and are involved with interns in cross-career learning communities during the year focusing on Critical Friends protocols (Bohan & Many, 2011). The TQP partnership grant and other initiatives such as Woodrow Wilson Fellowships and an Early College program assist the college in recruiting minority candidates into teaching. With 51% of our graduates belonging to minority groups, we are the largest producer of teachers from under-represented groups in the state.

This study was designed to learn from teacher candidates whether the tenets of our social justice framework were emphasized throughout their preparation. Research questions were:

How did candidates' perceptions of their programs' effectiveness at addressing the ten learning outcomes of our social justice framework compare? Were ratings affected by (a) the programs they were pursuing or (b) their progress in the program?

What specific features of program design and delivery played a role in determining candidates' perceptions of their program's effectiveness in highlighting the college's social justice framework?

METHOD

Participants

The sample included initial teacher education candidates at our institution. We sent out an electronic survey to 1,337 candidates who were at midpoint or endpoint in their programs in two academic years; 589 (44%) candidates responded (see Table 1 next page). As illustrated in the table, the college has 30 initial teacher preparation programs at the undergraduate and graduate levels, with differing design features and delivery models.

Survey Instrument

Survey questions were consisted of ten quantitative and two open-ended questions (see Appendix A). Candidates were emailed the survey and they responded anonymously. Responses were coded as four scales (1 being "no" and 4 being a "strength"). Confirmatory factor analysis (Muthen & Muthen, 1998) and a reliability analysis (Authors, 2014) indicated survey items as valid and reliable, $\chi^2=348.956$, RMSEA=0.096, CFI=0.979, TLI=0.973, Cronbach's $\alpha=0.93$.

Research Design

We utilized the sequential mixed-methods approach to analyze data (Creswell & Plano Clark, 2007). For investigating candidates' perspectives of program effectiveness, a 3-way analysis of variance (ANOVA) was conducted. The factors by candidates' ratings were: the ten learning outcomes, program affiliation (ECE, M/S, Pk-12; Table 2), and point in preparation (mid/

end). Quantitative results guided additional qualitative analyses. To explore the interaction effects between factors, we sorted the qualitative data by candidates' programs and point in preparation. Using the program groups to bound sets of data into cases, we conducted constant comparative analyses (Miles & Huberman, 1994) within each case. We created a codebook containing potential themes based on categories that emerged during the multiple open coding processes.

RESULTS

Candidates' Ratings on Our Framework's Learning Outcomes

In this study we analyzed the combined data from across two years, after we confirmed parallel results from separate analysis of two years individually. The main effect for the learning outcomes indicated that at least one of the means was significantly different from the rest, $F(9,5590)=18.29$, $p<.001$ (Table 2).

Table 2
Main Effects and Interaction Effects on 3-Way ANOVA

Source	df	MS	F	p
Learning Outcome	9	12.41	18.29	0.000
Program	2	103.81	152.97	0.000
Time	1	160.52	236.54	0.000
Program* Time	9	5.20	7.65	0.000
Error	5589	0.68		

Note. ANOVA=analysis of variance, Rating was done on a five point scale

The main effects for program affiliation and time point in program were also significantly different, respectively $F(2,5590)=152.97$, $p<.001$ and $F(1, 5590)=236.54$, $p<.001$. There was a significant interaction effect between program affiliation and time point, indicating that ratings increased from mid to endpoint differently for the three programs $F(9,5590)= 7.65$, $p<.001$.

Overall, programs were found to be relatively effective at addressing learning outcomes (Mean Range= 3.02 - 3.54) (Table 3 next page). A mean comparison using the Tukey HSD test categorized the ten mean ratings into four homogeneous subsets that differed significantly

Table 1 Program Affiliation of Respondents and Design of Programs

Program Grouping	Program Features			
	Majors	Degree Levels	Design	Field Component
Early Childhood Education (ECE) n = 171	-Birth-Five ECE-ESOL ECE-Special Ed	3 Undergraduate programs	2 year cohort programs	- Experiences across two levels (either birth thru age 3, ages 4-5; or Prek-2, grade 3-5) (ECE/Sp. Ed. students also have middle and secondary placements) - 1200 hours of placement with field work
	ECE-ESOL	1 Graduate certification-only program 1 MAT program	18 month – 24 month cohorts	- Experiences across two levels (Prek-2, grade 3-5) - Residency programs integrate coursework and field placement - Provisional teachers who complete practicum requirements in their own classrooms.
Middle and Secondary Education n= 237	Middle (5 content areas) Secondary Physics	2 Undergraduate programs	2-3 semester professional sequence with other courses taken at own pace	- Experiences across two levels (either grades 4-5, 6-8; or grades 6-8, 9-12) - Fall practicum – 300 hours - Spring Practicum – 600 hours - Practica combine students from across programs. - Methods courses (content and program specific) - Some are provisional teachers, completing practicum requirements in their own classrooms.
	Middle M/SCI Middle LA/SS Secondary Math Secondary English Secondary Sci Secondary SS	6 Graduate Certification only/MAT Programs	3 semester professional sequence with other courses taken at own pace	
Pre-K through 12 Education N= 140	HPE Art Music Foreign Language (Spanish, German, Latin, French)	6 Undergraduate degrees	2-3 semester professional sequence with other courses taken at own pace	- Experiences across four grade levels: Pk-2, 3-5, 6-8, 9-12. - Fall practicum – 300 hours - Spring Practicum – 600 hours (consists of two student teaching placements at two different levels) - Methods courses in professional sequence are content and program specific.
	HPE, Art, Music Sp. Ed. (General, Deaf Ed, Sp.Ed ECE, Phy. Dis., Intellectual Dis., Autism, ESOL	10 Certification only/MAT Programs 1 Online ESOL Certification/MAT program	2-3 semester professional sequence with other courses taken at own pace.	- Some graduate students are provisional teachers who complete practicum in their own classrooms.

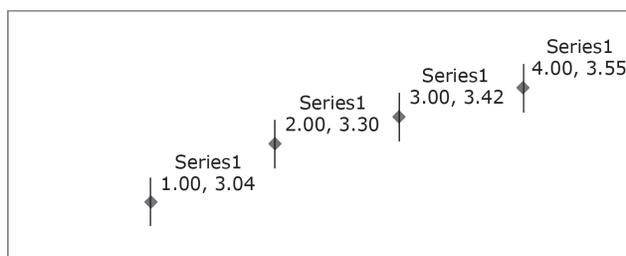
Table 3 Mean and SD for Ten Learning Outcomes

Learning Outcome	M	S.D
1	3.224	.780
2	3.220	.839
3	3.302	.863
4	3.022	.984
5	3.546	.727
6	3.411	.830
7	3.423	.858
8	3.391	.810
9	3.229	.893
10	3.049	1.011

Note: M=mean, S.D=Standard deviation

(see Figure 1). Participants rated Q 5, “My program has prepared me to know and respect individual differences, establish productive and ethical relationships with students,” as the learning outcome addressed most effectively. The next high ranked group of outcomes related to candidates’ own professional development, respecting diverse opinions, appreciating students’ culture, and using culturally responsive pedagogy (Q6, Q7, Q8) (Figure 1).

Figure 1. Four homogeneous groups of rank-ordered learning outcomes.



Note: Means separated by lines on the graph are significantly different.

The third homogenous group (Q1,Q2,Q3, Q9) included outcomes related to using foundational theories, research, content knowledge and pedagogy to effectively plan, organize, implement, and reflect on instructional lessons (Mean Range = 3.22 - 3.30).

Ratings of Q4 and Q10 were significantly lower for the fourth group (Mean= 3.02 and 3.05, respectively). These outcomes involved candidates’ preparation to critically analyze educational policies affecting urban schools

and to facilitate learner interaction with local and global communities.

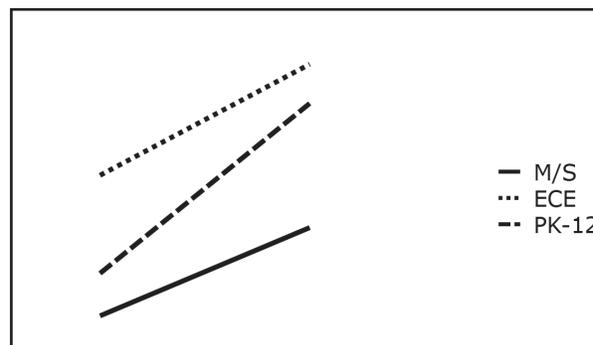
Candidates’ Perspectives on Program Effectiveness as They Matriculate in Specific Programs

To further investigate a significant interaction between program affiliation (ECE, M/S, Pk-12) and time point (mid/end), we conducted pair-wise comparison of programs at each time point. As shown in Table 4 and Figure 2, candidates’ ratings increased from mid to endpoint, however, the extent of increase differed across groups.

Table 4 Mid- and Endpoint Ratings by Program Groups

Time	M/S	ECE	PK-12
	M (SD)	M (SD)	M (SD)
Mid	2.91 (0.030)	3.34 (0.033)	3.04 (0.040)
End	3.18 (0.021)	3.68 (0.026)	3.56 (0.027)
N	237	171	140

Figure 2. Interaction effect between program group and time point in program.



ECE candidates rated their programs the highest at both points, with ratings increasing significantly from midpoint to end (Mean difference= .34, p=.05). The Pk-12 candidates gave their programs higher ratings at midpoint as compared to the M/S group. The increase in mid to endpoint ratings for the Pk-12 group was largest among three groups (Mean difference=.52, p<.05). The increase in ratings for the M/S programs from midpoint to end was the least (Mean difference =.28, p<.05).

The program and time point interaction effect was also investigated using constant comparative analysis of the open-ended survey data bounded into cases by program group and by point in program. Themes unique to each program group are discussed next.

Early Childhood Education Candidates

Analysis of this group's data revealed themes related to the programs' emphases on teaching the pre-service teachers to be responsive to diverse needs and the value of rich connections that programs made between clinical experiences and coursework.

The value of being able to respond to diverse needs. A primary theme for ECE candidates focused on understanding student differences and planning and implementing activities that fostered individuality and personal growth. Within this theme candidates, were not only grappling with cultural and linguistic diversity of students in their urban field placements; but also considering developmental learning needs of children.

Many comments revealed candidates' knowledge of and appreciation for the culturally responsive lens through which the programs were designed:

I considered the elements of respect and knowledge for various cultures and student experiences to be the most effective in the program. It was a consistent topic brought about in courses, field placements, and seminars. I think it is a very important role in education to have respect and knowledge for all cultures. I was able to encounter many students of various cultures through field placements, which was very vital.

Others highlighted the focus on culture,

For me, I believe the projects in my cultural diversity, literacy and child development courses were most effective in strengthening my understanding of multicultural pedagogy and diversity in the classroom. These projects were the text set and children's book, funds of knowledge/focal child, and culture quilts. Assignments in this program that connect development with a diversity or cultural aspect were very helpful in related behaviors and learning to students in my field placement.

Candidates' appreciation of the need to address diversity was also evident as a number of respondents asked for more depth on specific cultural issues as well as on different learning needs of students. These individuals appreciated "...the tremendous amount of information we received about differentiated instruction and supporting the individual needs of students" and "the experience in various schools throughout the program allowed me to

learn about culture ... and the importance of knowing each individual student as well as their learning needs."

Field experiences bring life to what is being taught. All ECE programs intersperse field experience with corresponding coursework, meeting 1-2 days a week on a PDS site. This intense combination of coursework and practical experiences was seen as extremely valuable in learning effective instructional strategies. One candidate explained, "I feel the program helped me develop into an educator who cares very deeply for individual learners; I was able to learn a lot from observing teachers and instructors in classrooms, which was much more effective than watching videos alone." Many candidates underscored the ways in which courses and assignments were "integrated with real life issues that exist today." One reflected on her entire program noting it "... not only grounded in theory but in every class and every assignment [I] learned strategies [I] could use immediately... to improve learning outcomes."

ECE candidates also emphasized the value of having experiences across multiple grade levels. The developmental sequence with corresponding coursework had a strong impact on candidates' perspectives, "The part of the program that I viewed most effective was being able to intern in such a variety of grade levels. It allowed us to gain experience from such a broad level that I know first-hand other schools do not offer."

Middle/Secondary Education Candidates

Data analysis from the M/S candidates revealed themes related to a perceived need for function and value in coursework and fieldwork, and concerns around administrative difficulties.

Desiring primary emphasis on practice. M/S candidates shared expectations that program components should focus directly on fundamental operation of classrooms. As one candidate stressed, "I believe that the hands-on experience did more for my learning than all of my coursework combined." Another emphasized the value of practical assignments stating, "...projects that I can use later when I begin my own teaching practice are much more beneficial, and prove to be great practice for writing lesson plans and creating student centered lessons."

The M/S candidates' feedback illustrated tensions when they felt course content had little or no connection to actual classrooms, for example,

Please, please actually address PRACTICAL

aspects of the job: lesson plans, different types of assessments, mock parent meetings, things that will really prepare us for the [classroom]. ... At this point, I don't think theoretical readings are particularly helpful for any class that accompanies the Practicum. As wonderful as Freire's thoughts on education are, I need a great deal more help with the aforementioned things, and much more practical aspects of ethical, legal and safety issues ...

When making favorable comments, candidates underscored applicability, such as:

[Science professor's] class taught me the most applicable concepts ranging from classroom management to content. He allowed us to discuss, in depth, about our Practicum experiences. He also modeled activities and teaching strategies that we could apply directly to our teaching experiences in our practicum. He also focused on the middle grades science content that was relevant and significant to all of us.

When candidates were unable to link theory to practice, they tended to devalue theoretical course content, "Get rid of all the pedagogy classes- it's about as helpful as a philosophy class. Field experience is all that matters!"

Interestingly, candidates discussed hands-on experiences and theoretical coursework as separate aspects of their preparation. The underlying tone in comments indicated the need for a foundational understanding of the theory/practice relationship. Candidates struggled to understand the explicit relationship of theories related to social justice and classroom practice as they endeavored to function effectively in their content area placements:

Everything we have learned seems like idealist theories to me. Unless I learn ways to implement these strategies into a real life classroom, I will be frustrated when trying to use them and probably quit trying after a while. I want to use the ideas [our professors] have taught us, but after my first experience in the classroom this semester, I feel extremely unprepared to do so. Our professors want us to be "agents of change," but how can we expect to change teaching single handedly without any guidance? ...

Administrative concerns clouding perceptions of program effectiveness. M/S candidates made significant

comments regarding administrative issues and concerns in this area intensified across progression in the program. By the end of their programs, candidates' administrative concerns were numerous with detailed recommendations. Many reflected candidates' difficulties juxtaposing field experience demands and course expectations. As one noted, "There should not be a class with so much work during the 2nd part of practicum. There is entirely too much work and not enough time for those students who are at the school 40+ hours a week, going to class one night for 2 1/2 hours and then huge assignments due along with practicum assignments." In addition, because M/S students were not cohorted for the majority of their courses, some had difficulty with class availability, as one commented, "Courses need to be offered on a more regular basis. I had to do too many alternative courses because the courses were not being offered often enough."

Communication issues also impacted candidates' ability to receive effective mentoring, "Communication between faculty and students should be greatly improved, with more attention to advisement of students and preparation for working in urban environments." Another remarked on inconsistent instructions provided to supervisors, "the communication between the university supervisors and the leaders of the middle school program needs to improve. There were times supervisors and student teachers were not on the same page." In summary, M/S candidates expressed strong and emotional concerns related to administrative issues, indicating that these issues were not only seen as inconveniences, but were also, perceived as clouding issues of teaching and learning during the preparation process.

Pk-12 Education Candidates

Themes for the Pk-12 candidates focused on: issues of culture and diversity, value of connecting to the reality of schools, and importance of learning communities in their growth as new teachers.

Grappling with culture and diversity in education. One area prominent in feedback from Pk-12 candidates was the emphasis on the scholarship of culture and multiculturalism within their programs. Candidates valued opportunities for examining their identities as future teachers, "developing a critical self-reflection ... as well as my personal culture and potential biases." They also valued engaging in activities that prompted examination of culture and equity in education. "The most effective elements of the program include informing us about diverse learners and how to support their learning through various teaching strategies. Thus far in

the program, I've really learned how to embrace cultural diversity and learn more about the different ethnic groups that make up our country's population." And, "... strategies to reach out to the needs of individual children, becoming caring and involved educators, support and modeling from instructors was very beneficial."

At the same time, there were some candidates who offered critiques on their programs' approaches, in that, they viewed courses addressing multiculturalism as having had lesser emphasis on "doing it," and greater emphasis on "knowing it." One candidate mentioned,

For example, the native language is a vital part of one's culture yet in this program we are not encouraged to use it. While I understand the emphasis on using English, the research that we read suggests that we use the native language in the classroom in some way to encourage transfer of literacy and self-esteem. I feel like this vital component of culture is left out of the program in favor of easier (and less genuine) cultural acknowledgments.

Connecting to realities of schools. For Pk-12 candidates, as for other program areas, connecting to the reality of classrooms formed another theme in the data. In general, Pk-12 candidate responses focused on how much they appreciated courses or experiences that were vital in helping them make connections to real life issues of urban and high-needs classrooms. They mentioned activities such as developing unit plans, assessment systems, strategies for behavioral intervention, and working on student motivation as extremely valuable in learning "real skills of teaching." However, unlike M/S candidates, these candidates valued the focus on human learning and social foundations, as one candidate remarked, "[these courses] helped me understand the complexity of the job of teaching, and know what is going on in children's minds and lives, behind the scenes." Many mentioned they wanted to eventually feel proficient in "tying it all together" and to be able to operate in real classrooms to make a difference in children's learning, as one commented, "Nuts and bolts pedagogy...how to link planning, performance, assessment to increase student learning. How to hold yourself accountable for student learning and how to conceptualize the learning arc you want to see in your students both in the short term and over the course of the school year."

Pk-12 candidates' recommendation for improvement included, "...more opportunities to directly apply [knowledge] in the field." Comments reflected a need for more time in classrooms prior to student teaching,

more demonstrations of effective strategies, and more classroom management/behavioral management experience in urban contexts.

The importance of peer support and learning communities. A third theme, unique to data from Pk-12 candidates, emphasized the importance of cohorts and learning communities.

I consider the cohorts very effective, because it helps to be able to talk to others who know what you are going through as they go through 'it' themselves...and practicing different instructional strategies on group projects gave me the opportunity to collaborate and put to work the methods that I heard, read, and discussed during the program.

Across Pk-12 programs, candidates indicated their appreciation of peer interactions and underscored that these led to a more "creative learning environment" and enabled "more open and respectful discussions." When this did not occur, individuals expressed a need for greater opportunities for peer-group collaboration. As one candidate noted, "There needs to be teamwork and communication for better learning. ... If we had a chance to know each other, we would work together during group projects and we would feel more empowered. Many of us simply felt alone this semester."

CONCLUSION

Recent changes in accreditation procedures in the United States have been motivated by the recognition of the need for teacher education institutions to be involved in continuous improvement (Cibulka, 2009; Cochran-Smith et al, 2009). We investigated whether the teacher education unit in one urban university had moved beyond basic compliance of listing social justice learning outcomes within course syllabi (Diez, 2010) to meaningful integration of coursework and field experiences focusing on learning to teach for social justice and equity. This study is limited in that we focused on students' perceptions of program effectiveness without corresponding investigation of candidates' performance. Although we analyzed quantitative ratings as well as qualitative feedback from candidates, the anonymous nature of responses prohibited our ability to return to candidates for additional information.

Candidates' ratings of their programs were overall high, indicating that candidates felt their programs had prepared them well. Although, all of our learning outcomes were developed with a social justice frame, it appeared

that some aspects of social justice were emphasized to a greater degree or more effectively. The learning outcome focusing on differentiating instruction and meeting the learning needs of all students, received the highest rating from candidates. Two learning outcomes which candidates ranked as least emphasized were: (a) critically analyzing educational policies and practices in metropolitan contexts, and (b) using communication strategies within local and global communities; suggesting that these social justice outcomes may not have been unpacked enough for candidates to feel as competent in relation to other outcomes.

The results have several implications, not just for the college and its programs, but for the field at large. Previous research shows that although beginning teachers may have their hands full with challenges of classroom instruction (Fieman-Nemser, 2012), teacher education programs can be designed so that candidates develop a critical lens and position themselves within a stance of social justice (Fisher, 2009). To support candidates in making connections to local and global communities, teacher educators can provide increased opportunities for school and community collaborations and out-of-class transformative learning experiences (Schaffer, 2011). Integrating study-abroad and online networking opportunities, can help candidates develop a global view of education, and understand how to situate learning in the global context (Sharma, Phillion, & Malewski, 2011; Trilokekar & Kukar, 2011).

Our design allowed us to not only examine unit-wide results, but to examine differences across program groups and explore factors related to those variations. The ECE programs received the highest ratings on all outcomes both at mid and endpoint, while the M/S program ranked lowest at both time points. The follow-up bounded caseanalysis approach for exploring thematic differences in students' perceptions led to a more nuanced understanding of factors which can impact program effectiveness within the same institution.

Overall, examination of qualitative data from the three bound cases underscored the need for coherence in teacher education programs. In our study, ECE data indicated strong coherence within programs. Through the interrelationship of coursework and field experiences and attention to cultural responsiveness and student diversity across assignments, and courses, the social justice framework of the college was consistently emphasized and became salient to students. For M/S candidates, data indicated a lack of perceived coherence both across theory and practice, and concerns over administrative issues and functionality may have

overshadowed candidates' appreciation for the social justice principles faculty intended to underscore (Assaf, et al., 2010). Although Pk-12 candidates liked the opportunities within their courses to understand issues of diversity and culture in classrooms, they expressed a desire for more genuine, practice-based opportunities.

Coherence has been seen as a key to teacher education innovation (Cochran-Smith et al, 2009; Hammerness, 2006) in that, without coherence between schools and universities, and between program design and delivery, reform efforts are not likely to succeed. Researchers have underscored the importance of equipping preservice teachers with a tool-kit of possibilities, options, and a range of skills that they will be able to apply in classrooms (Agarwal, Epstein, & Oppenheim, 2009; Anderson & Stillman, 2011). In instances where coherence between field- work and course-work is not strong, and all stakeholders like: instructors, supervisors and cooperating teachers are not committed to the ideals of teaching for social justice, teacher candidates may come away feeling incompetent to deal with issues of diversity (Freedman & Appleman, 2009). A related issue is coherence in values and capacities of all stakeholders involved in preparing teachers for social justice. An important issue to investigate is: how effective is the communication from the college to all its stakeholders about its vision, goals, and processes for preparing teachers to teach for social justice. How committed are instructors to genuine multicultural pedagogy? Are the supervisors and cooperating teachers aware/familiar with our focus? All of these issues play a major role in candidates' sense of preparedness to teach for social justice and have implications for professional development of faculty, supervisors and cooperating teacher to have a shared understanding of multiculturalism and teaching for social justice (Keehn & Martinez, 2006).

M/S candidates' administrative concerns around course offerings, work overload across the program, and a need for improved communication from the college to the supervisors and the cooperating teachers raise additional concerns. Although administrative issues are seldom discussed in effectiveness of a social justice curriculum, these issues came to the fore in M/S candidates' responses, who felt blindsided by the administrative obstacles, which may have made them lose focus on issue of diversity and social justice.

The P-12 candidates also stressed the importance of cohorts and effective learning communities to support their development. This is an important feedback not just for our college, but also for the field of teacher education. Learning to teach for social justice may

become especially challenging when students are not cohorted and feel alone, as some of the responses suggested. Past research has emphasized the critical role learning communities can play in offering preservice as well as in-service teachers ongoing support, professional learning, increased competence, and opportunities for research and self-reflection (Lieberman & Mace, 2008; Sargent & Hannum, 2009). The support system of professional networks and learning communities, can make beginning teachers feel confident about their work of social justice within high-needs classrooms and may also impact teacher retention (Freedman & Appleman, 2009). Although our college has established cross career learning communities in the PDS schools which involved P-12 teachers and teacher candidates (Bohan & Many, 2011), not all candidates have their field placements in these sites. Sometimes, P-12 and secondary program candidates are the only interns in their specific content area at a site, making networking difficult. Our candidates' feedback suggests that more needs to be done to offer collaborative support structures to such candidates, especially during clinical experiences. One possibility might be to establish program specific virtual communities for candidates in programs which are not designed on a cohort model. Previous research has indicated use of such communities, which operate in a 3rd space environment, can provide valuable support for candidates seeking to work for social justice in urban contexts (Fisher, 2009). Such co-constructed communities can provide venues for reflection, discussion, collaboration, and support to be the goals of the individuals involved (Lieberman & Mace, 2008).

In summary, when approaches in university coursework and cooperating teachers' instructional practices are intertwined, opportunities for debriefing in learning

communities are provided, and logistics of program implementation are administered smoothly, the effectiveness of programs is more apparent to teacher candidates. Urban teacher candidates, in particular, may need to delve into social justice issues in a significant, on-going manner throughout the course of preparation, to be prepared as future teachers to offer resistance and be agents of change even in the face of an oppressive policy environment and prescribed curricula (Anderson & Stillman, 2011; Assaf, et al. 2010).

Thus, this study illustrates how feedback from candidates on areas of a social justice framework that need greater emphasis can be valuable in helping teacher education faculty identify potential changes in the design and functioning of programs both across the college as a whole and within specific departments or groups of programs. This study also indicates a need to examine differences within colleges of education to explore how issues related to program design, program content and delivery, or administration may differ across different programs within the college, and shape candidates' sense of preparedness to work effectively in urban contexts (Cochran-Smith et al, 2009). Additionally, emphasizing certain aspects of teaching for social justice; such as, learning to critically analyze school district policies and curriculum and helping children become members of a global community, may require more reflection and deliberate instruction from faculty. By maintaining a focus of inquiry in the evaluation of our practices in teacher education, including listening to candidate's opinions, we can optimize our ability to prepare effective teachers who are: informed and empowered to serve as change agents, committed to and respectful of all learners, and engaged with learners, their families, and their communities.

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Appendix A

Student Assessment of Program Preparation: Learning Outcome Items

Please rate your program on its effectiveness in emphasizing each of the following learning outcome of the conceptual framework.

- Unsure: I do not understand what this learning outcome means
- No: This learning outcome was not emphasized in my program
- Emerging: This learning outcome was minimally emphasized in my program
- Developing: This learning outcome was emphasized in my program, but not consistently
- Strength: This learning outcome was well emphasized in my program

Our candidates use their knowledge of child, adolescent, and adult development and theories of learning to design meaningful educational opportunities for all learners. (CF 1.1)

Our candidates possess and use research-based, discipline-specific knowledge and pedagogy to facilitate learning for all. (CF 1.2)

Our candidates reflect critically upon data as part of a recursive process when planning, implementing and assessing teaching, learning, and development. (CF 1.3)

Our candidates critically analyze educational policies and/or practices that affect learners in metropolitan contexts. (CF 1.4)

Our candidates know and respect individual differences, establish productive and ethical relationships with candidates, and modify the learning environment to positively impact student learning. (CF 2.1)

Our candidates create engaging learning communities where the diverse perspectives, opinions, and beliefs of others are acknowledged and respected. (CF 2.2)

Our candidates commit to continuing personal and professional development.(CF 2.3)

Our candidates use knowledge of students' cultures, experiences, and communities to create and sustain culturally responsive classrooms and schools. (CF 3.1)

Our candidates coordinate time, space, activities, technology and other resources to provide active and equitable engagement of diverse learners in real world experiences. (CF 3.2)

Our candidates implement appropriate communication techniques to provide for learner interaction within local and global communities. (CF 3.3)

What elements of your program did you consider most effective?

What recommendations would you have for program improvement?

Effective Integration of Multimedia in Online Learning Environment

Holim Song

Abstract: With the advancements of Web 2.0, multimedia is increasingly being used in teaching and learning, and the use of multimedia in online courses is wide spreading. Instructors are able to deliver multimedia materials in their online courses and students are learning from multimedia technology that delivers instruction. Considering the potential value of multimedia, instructors need to fully understand the capabilities, limitations, and applications of this technology and prepare for its use in their online course in order to take advantage of multimedia technology. It is also important for instructors to consider and understand the characteristics of different media formats and the limitations of delivering media in a networked environment.

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Keywords: Multimedia, Online Learning Environment, Technology Integration, Effective Integration, 21st Century Classroom, Web 2.0

INTRODUCTION

In the world of education, multimedia tools are used to create stimulating and interactive online education that incorporate audio, video, and animation capabilities. The definition of multimedia has changed over time. McKee and Moody (2010) defined multimedia as the combination of text, graphics, sound, animation, and video with computing technology to provide the user with a multisensory experience. Mayer (2009) states that multimedia is the tools and products that utilize computer technology to enable the production, manipulation, and exchange of informative and educational materials. Reed (2003) explained how teachers and students are able to take advantage of multimedia technology to access digital media such as audio, video, and data via the Internet. Mayer (2009) highlighted the growing popularity of video conferencing via compressed digital video technology, which provides students at different campuses access to live interactive courses.

The impact of multimedia on learning is still controversial issue. There are many studies reporting that multimedia-based instruction can have a positive impact on student achievement, and effective use of this technology will affect the students' achievement in online courses (McKee and Moody, 2010; Vogt et al., 2001; Mayer, 2009; Reed, 2003). According to these studies, multimedia components, such as graphics, audio, and video can be integrated in online courses to enhance students' understanding. For instance, Mayer (2009) claimed that multimedia improves motivation and thereby improves understanding. Moreover, multimedia can be combined to produce a visually enriching environment that has the potential to improve the online instruction and facilitate student learning. According to McKee and Moody (2010), the utilization of animation, video, and audio in online courses can be effective in enhancing the students' understanding of vital concepts. The instructional design

of these online courses is particularly significant for courses that have a strong emphasis on visual aspects, such as construction processes or engineering. A meta-analysis study by Sung and Mayer (2013) concluded that multimedia-based instruction was more effective than traditional instruction. However, some studies showed that traditional instruction was more effective than multimedia-based instruction. Sung and Mayer (2013) confirmed that multimedia-based instruction has overall positive effects on student learning, but it largely depends on what type of instruction with which it is being compared. Dillon and Gabbard (1999) reviewed 30 experimental studies on multimedia effects and found that there were no significant evidences that multimedia improves comprehension. Mayer (2009) also viewed that the use of media does not influence student achievement. "It was not the medium that caused the change but rather a curricular reform that accompanied the change. Basically, the choice of vehicle might influence the kind or distributing instruction, but only the content of the vehicle can influence achievement" (Mayer, 2009, p. 150). Mayer further contended that multimedia is a delivery system for instruction and does not directly influence learning.

Integrating multimedia components in online courses has been a hot topic since Internet technology has been introduced and the problems with online courses have been extensive due to the limitations of computer hardware, software, and bandwidth. However, with the rapid advancement of multimedia technology, these issues have become less prominent in online courses. The recent advancement of computer hardware, the increasing number of high-speed Internet connections, and easy-to-use software applications make the process of using multimedia much easier (Ryan & Kasturi, 2002).

CONSIDERATIONS FOR MULTIMEDIA DESIGN

Considering the potential value of multimedia, online instructors need to fully understand the capabilities, limitations, and applications of this technology and prepare for its use in their online courses (Reed, 2003). If multimedia courses are not designed properly, the integration of audio, video, and other multimedia elements will distract rather than enhance Web-based instruction. Mayer (2009) believed that well-designed multimedia online courses can provide an opportunity for students to improve the learning process. Woo (2014) also stated that effective multimedia design involves a systematic and comprehensive approach to analyze the context of use and aspects such as the learner, task, and

setting. They identified four elements of multimedia design: content, structure, access, and style.

Multimedia makes high demands on the network, computer hardware, and the user. Preparing multimedia is time-consuming task and poses big challenges on the instructors' side. However, it is important for instructors to consider and understand the characteristics of different media formats and the limitations of delivering media in a networked environment. In order to teach online courses effectively, instructors should employ multimedia that is instructional and focused on students' performance, rather than merely entertaining (Reed, 2003). The study also showed that if content are not correlated with multimedia, the comprehension rate will be lower. According to Ryan and Kasturi (2002), multimedia should have text, graphic, still images, and video, and support interactivity with the learners to determine and control the sequence and content.

According to Pang (2009), when instructors add multimedia components in their online courses, they should consider the instructional necessity of the media elements, the accessibility to end-user, and technical limitations of the delivery of multimedia content via the online course. For instance, online courses that require high-quality multimedia components and high-speed networks might perform poorly given under different conditions. A large multimedia file can be easily downloaded and viewed on campus networked computer, but it may take a long time to download and view on a student's computer with a dial-up modem connection. Instructors should be aware of the limitations of the student's computing experience, as well as the limitations of bandwidth, computer hardware, and software (Pang, 2009).

Moreover, if instructors add multimedia elements that require special plug-ins or software to view the multimedia elements on their online courses, they should consider two things. First, the confusion and annoyance of downloading and installing plug-ins may affect the perceptions of students regarding online course. Second, it is not a good idea to create content in an unpopular file format—creating multimedia content in the standard formats for operating systems and browser software should be considered. Instructors must also explain exactly what software and hardware is needed to view multimedia elements and provide instructions for installing the specific software if needed (Woo, 2014).

Graphics and animations: Graphics are used to supplement text. Woo (2014) outlined five functions of graphic illustrations. First, graphics can make decorations

by making text more appealing and attractive. Thus, graphics can draw more viewers' attention to the text. Second, graphics can represent information in the text such as a person, place, or thing. Third, graphics can help viewers remember key information. Fourth, graphics can help organize information into a memorable structure. Lastly, graphic illustrations can serve a descriptive function to help reader understand the concepts presented in the text. On the other hand, one study claimed that graphics have provided mixed results on learning. Pierce and Fox (2012) showed in their review of 16 literatures that only 3 studies found positive effects of graphic illustration and 8 studies reported mixed results for animated graphics. The other 5 studies found no effect at all. It appears that graphics themselves can make texts more attractive and appealing, but are not beneficial to learning. However, Nielson (2000) claimed that graphics provide a benefit when they are used to improve learners' understanding of texts by illustrating concepts and organizing textual information, and that animated graphics also increase the comprehension.

Most Internet animation requires special plug-ins for viewing except the animated GIF format. The animated GIF format combines individual GIF images into a single file to create animation. It can be set to loop on the page or to play once. However, GIF animation format has several hindrances. It does not provide interface controls, so learners have no way to stop looping animations, which may affect students' ability to take in information. If instructors add animation next to content, it may also divert readers' concentration and keep them from the objective of the online course (Nielson, 2000). Study showed that moving text is harder to read than static text, and moving animations make it hard for students to concentrate on page content because movement on the computer screen can dominate learners' attention (Nielson, 2000; Vossen et al., 1997). Instead, they suggested that instructors use animations: (1) to draw the learners' attention or alert viewers to new information, (2) to demonstrate navigation in a particular direction, and (3) to create icons for actions that can not be adequately expressed with a flat, static picture.

Macromedia Flash animation is one of the fastest growing multimedia formats. Because of its ability to produce small file sizes and interactivities, Flash is a very useful media format to incorporate into an online course and to explain concepts visually over dial-up modem connections (Macromedia, 2004). Now with Flash MX, instructors can add descriptive text to animations, forms, movies, and content that is readily accessible.

Soma, Riskin, Harris, Collins, Ngo, and Ferre (2002)

discuss the use of Macromedia Flash animations for an online electrical engineering course. In order to teach students how to design functional circuits using specific concepts, instructors are confronted with the following challenges: (1) providing students with the opportunities to acquire problem-solving skills; (2) providing them with sufficient exercises to practice their skills without using excessive class time; (3) generating effective practice exercises to ensure students' understanding; and (4) offering valuable feedback to all students, which cannot be performed by the instructor. Through Flash animation, the Web site generates practice exercises that challenge online students to practice their acquired concepts. Once students complete exercises that involve plotting lines from a graph, the computer produces the correct image, while retaining the students' work, thus enabling them to review their work and determine their level of accuracy. In other exercises, students are able to use Flash to see vivid demonstrations of various complex concepts. They are then able to interact with the Web site in a step-by-step process to determine whether they have understood the concepts (Soma et al., 2002). When adding Flash animation in online courses, instructors should also inform students to download Flash plug-ins to view this animation. However, developing Flash animation is a big challenge for online course instructors. It is also time-consuming and requires sophisticated programming and graphics skills (Vossen et al., 1997).

PowerPoint: Microsoft PowerPoint is another multimedia presentation tool that is widely used in online courses. More and more online course instructors are using PowerPoint presentations in their online courses. Online instructors can synchronize still images, audio, and video with text on PowerPoint slides. Now PowerPoint presentations can be saved as HTML files to use on the Web (Cavanaugh & Cavanaugh, 2000). However, online instructors should be careful when adding PowerPoint slides to their courses. The following considerations may help them to incorporate PowerPoint slides (Cavanaugh & Cavanaugh, 2000).

It is important to keep in mind that students should have PowerPoint application software or a PowerPoint viewer on their computer in order to view the PowerPoint lectures. PowerPoint presentations will be sent via the Internet. If instructors include multimedia elements such as images, sound, and video, it is important to keep the file sizes of these elements as small as possible. File size is a critical issue in the online learning environment. Adobe Photoshop, Sound Forge, and video editing program Adobe Premiere can optimize these multimedia elements for online delivery. The use of images will motivate students to read the text. However, images

included in a presentation should relate to the content. Instructors should decide which type of image is appropriate. Otherwise, the image may cause confusion or distract from the main points. Images should not be added to the content in a way that interferes with the student readings. Moving images can be distracting. Any moving image should be set to play once or a limited number of times because the moving images onscreen will draw students' eyes away from the text. It is also recommended not to set video clips to automatically start in a slide, but instead to allow students to choose when to start the video segments. It may also be better to have a small still image to start the video in a window.

Sound should be used to enhance the presentation. Avoid repeating sound because it often distracts from the purpose of the presentation. It is recommended that instructors test their presentations on various computer platforms. Different platforms and settings can cause changes in the display of content, and having a different contrast level or changing how the image appears could cause disruption of the presentation.

Streaming Video: Video is an efficient way to deliver information. According to Nielson (2000), when instructors add video as an instructional medium in their online courses, they need to use it to enhance the content, rather than to simply deliver it; the video must complement the materials in the online course. Mayer (2009) also stated that video in multimedia-based instruction is an important component, but design issues and the factors that influence the quality of the video must be considered.

Streaming video is defined as video data transmission over the Internet network (Reed, 2003). This term implies a one-way data transmission to the users. The user's computer buffers a few seconds of streaming video before it starts sending it to the screen, which compensates for delays. Streaming video allows the learners to view live video over the Internet, and it also allows the server to adjust the streaming video data rate depending on the user's connection status, whether the connection is a high-speed such as DSL and cable modem or a 56K modem (Reed, 2003).

The size of video files, compared to that of other data types, is huge. Uncompressed video, such as AVI format video, is composed of thirty frames per second. Each frame has a resolution of 720 x 486 pixels, which requires almost 170 million bits per second to broadcast. This is a much higher data rate than current Internet technology is capable of sending, so the video file must be compressed to be usable and manageable. A video

file that is accessed via the Internet must be compressed (Dixon, 2000). A considerable literature related to the current and potential uses of streaming video exists. Reed (2003) used various methods of online courses, including compressed video over the Internet. Using Real's streaming technology, they offered the class off campus in both synchronous and asynchronous modes. Students had options to participate in both modes over the Internet. The interactive chat system allowed instructor and students to communicate and to ask questions. However, a number of hardware and software problems were reported. For example, instructors and students had experienced frequent hardware and software failures during the course delivery. Problems such as incompatibilities with computer hardware and software, loss of synchronization between audio and video, and interaction barriers due to audio difficulties were reported. In addition, due to the slow response time, students lost the topic by the time that instructors were talking another topics. Reed (2003) concluded that instructors and students required a huge amount of time to become fluent in the new streaming video technology and encountered unexpected problems. Instructors need more time to prepare their courses for this delivery mode. Technical expertise and willingness on the part of the instructor and students are also needed.

Instruction using streaming video technology may have a negative impact on students' perceptions regarding online courses (Reed, 2003). To overcome the issues and problems regarding streaming video in online courses, instructors need to consider the following points (Polloff & Pratt, 1999; Reed, 2003; ION, 2003). These points may help instructors integrate video streaming in their online courses.

1. Instructors should remember the bandwidth limitations. If students are using Internet on school campus, then streaming video is feasible. They can download streaming video smoothly. However, if they are using home computer with dial-up 56K modems, video and audio quality are not expected to be feasible. Thus, students may perceive the online course as a frustrating delivery mode. If instructors think that motion is not necessary, they may consider an illustrated audio format.
2. Instructors always make sure that students have the latest streaming video software installed on their computer. Currently three main software formats (RealNetwork's RealVideo, Microsoft's Windows Media Player, and Apple's QuickTime) are available to choose from for viewing streaming video over the Internet.

3. Set the video data rate lower than student's average Internet connection. Because of the compression of the video, the quality will be less than optimal. The important point is that streaming video should be viewable by the viewer's computer.
4. Instructors should always make sure that the streaming video is used to assist students' learning—not to distract.

However, if the adoption of streaming video overcomes barriers such as a lack of high-speed Internet access and minimal technical support, instructors can take advantage of this new streaming video technology to deliver their online courses. As high-speed internet access increases, online courses with streaming video open up many possibilities in online education (Dixon, 2000).

CONCLUSIONS

With the advancement of computer technology, multimedia is increasingly being used in teaching and learning. Instructors are able to deliver multimedia materials in their online courses and students are learning from multimedia technology capable of delivering instruction. However, instructional multimedia for online courses requires high demands on the network, computer hardware, and the user. Preparing multimedia is time-consuming task and big challenging on instructor side. It is essential for online instructors to understand the characteristics of different media formats and the limitations of delivering media in their online courses.

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Early Childhood Special Education Pre-service Teachers: Perceived Self-confidence in Traditional and Professional Development School Field Placements

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Abstract: Teacher education programs aim to provide the best possible field experiences for pre-service teachers in preparation for successful student teaching. Teacher accountability for student achievement is at least partly based on high stakes testing. Professional Development Schools (PDSs) are a model of pre-service field experiences that are known to effectively prepare pre-service teachers for student teaching experiences. Although both traditional and PDS models have merit, this study surveyed and compared responses from twenty-three pre-service early childhood with special education undergraduates from both models and found through quantitative descriptive statistics and open-ended responses that pre-service teachers in a PDS placement linked confidence in preparedness for student teaching to student achievement and behavioral data, which is aligned with similar student teacher and teacher accountability expectations.

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Keywords: pre-service teachers, early childhood education, special education, professional development, field experience

INTRODUCTION

Expectations for teachers of young children have risen drastically over the past two decades. Teachers have been challenged to meet the needs of all children in their diverse classrooms and are held accountable for their students' academic progress. "Light bulb" moments are no longer proof that children are learning necessary academic skills. Assessment data must be collected, analyzed, and used for instruction and intervention. As a result, teacher education programs are charged with preparing future teachers to meet the high expectations and demands of the profession. The Council for the Accreditation of Educator Preparation (CAEP) (2013) Standard 2 mandates that the providers of teacher education programs work with partner schools to design clinical experiences of sufficient depth, breadth, diversity, coherence, and duration to ensure candidates demonstrate their effectiveness and positive impact on student learning.

Two departments within a Pennsylvania state school system offer a dual Early Childhood with Special Education (ECSP) program for students who want to become teachers. All of the candidates are required to complete a pre-student teaching II (PSII) experience where they are taking university courses for the first ten weeks of the semester and are in the field the final five weeks. Students can choose between two models of PSII: traditional model and the Professional Development School model. The traditional PSII experience involves taking classes during the first ten weeks, completing five Friday observations in their PSII classrooms, and spending the last five weeks in those classrooms. The next semester, the students are assigned different placements for their two student teaching experiences. In the PDS model, students are taking classes and spending time in the classrooms from the first day of the semester as they complete their ten weeks of classwork; the last five weeks

are spent in their field placements full time. The PDS students will be placed in the same classroom for their first student teaching experience the following semester.

The principal investigators for this study are directly responsible for field placements and want to be sure teacher candidates are getting effective experiences that will allow them to be prepared to face the high expectations of teachers and become valuable members of the teaching profession. They want to be certain that candidates are getting the sufficient depth and breadth in their field placements in order to assist them with becoming confident professionals. It is their contention that confident pre-service candidates will develop into confident and capable professional educators. Thus, this study was designed to measure the confidence levels between the traditional and PDS PSII experiences. The first part of this study's survey is based on a framework for teaching designed by Charlotte Danielson (2007) that is used to evaluate teachers and teacher candidates in the state of Pennsylvania and many other states. Additional open-ended questions were created to add richness to the study and to gain clarification of responses.

PURPOSE OF THE STUDY

The purpose of this study was to examine Early Childhood with Special Education (ECSP) pre-service teachers' perceptions of their confidence levels moving into student teaching as well as their perceptions of certain components of their Pre-Student Teaching II (PSII) experiences. A comparison was made between those students who participated in the traditional PSII experience and those students who chose to participate in the Professional Development School (PDS) PSII model.

Research questions are as follows:

1. What are the perceptions of ECSP pre-service teachers' confidence levels as they transition from pre-student teaching to student teaching?
2. What are the perceptions of ECSP pre-service teachers regarding the connections they were able to make between coursework and field experiences during their PSII semester?
3. What do the ECSP pre-service teachers identify as ways they made a difference in the academic or behavioral progress of the students in their PSII classrooms?
4. What are the similarities and differences

in confidence levels, connections between coursework and classroom experiences, and perceptions of making a difference in students' academic and behavioral progress of ECSP pre-service teachers who participated in the traditional PSII placements and the Professional Development School placements?

LITERATURE REVIEW

According to Krug, Love, Mauzey, and Dixon (2015), "The main goal of any university level student teaching degree program involves minting teachers who are good problem solvers and confident in the classroom" (p. 339). In their study of prospective teachers, Iqbal and Mahmood (2010), tested candidates' confidence levels in five stages of preparation. During the first stage, pre-service teachers were exposed to video recordings of teachers in various classroom settings. They had not yet been to schools for actual classroom teaching. The experience was designed to bridge theory and practice which the researchers presumed could result in an increase of self-confidence. After two weeks of teaching practice, stage two occurred. The prospective teachers were exposed to challenging classroom situations that were different from the simulations presented to them during their course work. Stage three happened after five weeks in the field and included feedback from supervisors and teachers. After week six, which was deemed a "reflection week," the fourth stage execution of the scale was administered. The final stage was conducted after week eight where prospective teachers presumably had an opportunity to overcome their deficiencies reported by their supervisors or realized during their self-reflection period.

The results of the study (Iqal & Mahmood, 2010) demonstrated a decrease in self-confidence at stage one which the authors attributed to the challenging experience teacher candidates face while making the transition from theory to practice. "This confirms a strongly held general belief among students at universities that what they are taught is rarely related to whatever is happening in the real classroom. Therefore, teachers' training can become more meaningful if practice teaching is embedded in the programme instead of offering it as an aloof activity carried out once during the course." (p. 31). Self-confidence improved in the remaining stages. The authors attributed the improvement to adjusting to the real classroom environment and receiving support from supervisors, peers, and classroom teachers.

Professional Development Schools (PDSs) were created in the mid-1980s and are mandated in several states

(NAPDS, 2008) but not in the state of Pennsylvania. According to a statement prepared by the National Association of Professional Development Schools (NAPDS) (2008), “Professional Development Schools (PDSs) were designed to accomplish a four-fold agenda: preparing future educators, providing current educators with ongoing professional development, encouraging joint school–university faculty investigation of education-related issues, and promoting the learning of P–12 students” (p. 1). Darling-Hammond (2006) described traditional student teaching placements as a “haphazard experience” (p. 156). She studied several Professional Development School (PDS) partnerships and discovered, “Because it occurs concurrently with coursework, candidates are guided in their clinical work through assignments that shape what they notice and do in the classroom...” (p. 156). Within the PDS framework pre-service teachers can gradually assume responsibility for classroom teaching over time.

METHODOLOGY

The University where this study was completed has a rich history in teacher education. It was founded as a Normal School and is one of fourteen institutions in a State System of Higher Education. Participants of this study were all enrolled in the Early Childhood with Special Education Program (ECSP) and had just completed their pre-student teaching II (PSII) experience during the fall semester. Twenty-three undergraduate teacher education candidates completed the survey. Nine of the students participated in the traditional PSII field experience, nine of the students participated in the rural Professional Development School (PDS) PSII field experience, and five students had just completed their PSII placements in an urban PDS. Fourteen candidates were placed in Early Childhood classrooms and nine candidates had Special Education placements.

A survey instrument was designed by the researchers to capture confidence levels of the candidates, perceived connections between coursework and field experiences, and perceptions of impacts made on children’s academic and behavioral performances. The survey instrument (Appendix A) was based on Charlotte Danielson’s (2007) Framework of Professional Practice. Upon approval from the University’s Institutional Review Board, the survey was distributed via Qualtrics.

RESULTS

Results are reported through analysis of the quantitative surveys and open-ended questions. Due to the small sample size, descriptive statistics are used to analyze the quantitative results. Open-ended questions were analyzed by identifying common themes in the responses.

Quantitative Surveys

Surveys were distributed via Qualtrics to all ECSP students who participated in the pre-student teaching experience in the fall 2015 semester. Twenty-three candidates replied to the survey; nine students were in a traditional PSII placement and fourteen participated in a PDS experience. Pre-service teachers were asked to rate their confidence levels moving into student teaching on a Likert Scale. Results of the perceptions of confidence levels of the traditional PSII placement candidates are demonstrated in Table 1 (See page 50).

In every category except one (confidence level in facilitating student participation), two candidates (22%) who were placed in traditional PSII placements either strongly disagreed or disagreed that they were confident in their abilities/skills moving forward into student teaching. Seven pre-student teachers (77%) neither agreed nor disagreed in seven of the categories. Six pre-service teachers (66%) either agreed or strongly agreed that they were confident in the following three categories:

- Using knowledge about students to plan effective lessons
- Creating quality assessments to evaluate student learning
- Communicating meaningfully with families

Seven candidates (77%) agreed or strongly agreed they were confident in seventeen of the twenty-three categories. Eight pre-student teachers (89%) agreed or strongly agreed they were confident in the two remaining categories: managing student behavior and finding resources for all students.

Results of the perceptions of the confidence levels of the PDS PSII placement candidates as they moved forward into student teaching are demonstrated in Table 2 (See page 51).

Results for the PDS group indicated that only one candidate (7%) disagreed in one category: responding appropriately to student misbehavior. Fifteen pre-student teachers (65%) neither agreed nor disagreed in nine of the categories with the highest number of responses (4 - 29%) in the area of managing student behavior. Ten pre-

Table 1 *Traditional Pre-Student Teaching II Placement Candidates' Perceived Confidence Levels*

Question	Strongly Disagree N (%)	Disagree N (%)	Neither Agree nor Disagree N (%)	Agree N (%)	Strongly Agree N (%)
Understand content to plan effective lessons	1 (11%)	1 (11%)	0 (0%)	4 (44%)	3 (33%)
Use knowledge about students to plan effective lessons	1 (11%)	0 (0%)	2 (22%)	2 (22%)	4 (44%)
Prepare instructional materials for all students	1 (11%)	1 (11%)	0 (0%)	3 (33%)	4 (44%)
Design formative assessments	1 (11%)	2 (22%)	1 (11%)	5 (56%)	0 (0%)
Create environment of respect	1 (11%)	1 (11%)	0 (0%)	3 (33%)	4 (44%)
Facilitate student interaction with other students	1 (11%)	0 (0%)	1 (11%)	1 (11%)	6 (67%)
Manage student behavior	1 (11%)	0 (0%)	0 (0%)	5 (56%)	3 (33%)
Respond appropriately to student misbehavior	1 (11%)	0 (0%)	1 (11%)	5 (56%)	2 (22%)
Give clear directions	2 (22%)	0 (0%)	0 (0%)	5 (56%)	2 (22%)
Have excellent written communication skills	2 (22%)	0 (0%)	0 (0%)	5 (56%)	2 (22%)
Have excellent verbal communication skills	2 (22%)	0 (0%)	0 (0%)	5 (56%)	2 (22%)
Ask a variety of questions to make students think and apply	2 (22%)	0 (0%)	0 (0%)	5 (56%)	2 (22%)
Facilitate student participation	1 (11%)	0 (0%)	1 (11%)	1 (11%)	6 (67%)
Engage students in hands-on learning experiences	1 (11%)	1 (11%)	0 (0%)	1 (11%)	6 (67%)
Create quality assessments to evaluate student learning	1 (11%)	1 (11%)	1 (11%)	6 (67%)	0 (0%)
Be flexible and responsive to students' needs during instruction	2 (22%)	0 (0%)	0 (0%)	5 (56%)	2 (22%)
Be a reflective practitioner	2 (22%)	0 (0%)	0 (0%)	4 (44%)	3 (33%)
Communicate meaningfully with families	1 (11%)	1 (11%)	1 (11%)	6 (67%)	0 (0%)
Form positive relationships with cooperating teachers	2 (22%)	0 (0%)	0 (0%)	2 (22%)	5 (56%)
Serve as a strong advocate for children and families	1 (11%)	1 (11%)	0 (0%)	2 (22%)	5 (56%)
Understands standards to plan effective lessons	1 (11%)	1 (11%)	0 (0%)	5 (56%)	2 (22%)
Find resources for all students	1 (11%)	0 (0%)	0 (0%)	5 (56%)	3 (33%)
Create an environment of positive rapport	1 (11%)	1 (11%)	0 (0%)	3 (33%)	4 (44%)

N=9

Table 2 PDS Pre-Student Teaching II Placement Candidates Perceived Confidence Levels

Question	Strongly Disagree N (%)	Disagree N (%)	Neither Agree nor Disagree N (%)	Agree N (%)	Strongly Agree N (%)
Understand content to plan effective lessons	0 (0%)	0 (0%)	1 (7%)	5 (36%)	7 (50%)
Use knowledge about students to plan effective lessons	0 (0%)	0 (0%)	0 (0%)	6 (43%)	8 (57%)
Prepare instructional materials for all students	0 (0%)	0 (0%)	0 (0%)	5 (36%)	9 (64%)
Design formative assessments	0 (0%)	0 (0%)	1 (7%)	8 (57%)	5 (36%)
Create environment of respect	0 (0%)	0 (0%)	1 (7%)	4 (29%)	9 (64%)
Facilitate student interaction with other students	0 (0%)	0 (0%)	0 (0%)	5 (36%)	9 (64%)
Manage student behavior	0 (0%)	0 (0%)	4 (29%)	5 (36%)	5 (36%)
Respond appropriately to student misbehavior	0 (0%)	1 (7%)	2 (14%)	8 (57%)	3 (21%)
Give clear directions	0 (0%)	0 (0%)	0 (0%)	8 (57%)	6 (43%)
Have excellent written communication skills	0 (0%)	0 (0%)	0 (0%)	5 (36%)	9 (64%)
Have excellent verbal communication skills	0 (0%)	0 (0%)	0 (0%)	7 (50%)	7 (50%)
Ask a variety of questions to make students think and apply	0 (0%)	0 (0%)	2 (14%)	4 (29%)	8 (57%)
Facilitate student participation	0 (0%)	0 (0%)	0 (0%)	7 (50%)	7 (50%)
Engage students in hands-on learning experiences	0 (0%)	0 (0%)	0 (0%)	6 (43%)	8 (57%)
Create quality assessments to evaluate student learning	0 (0%)	0 (0%)	2 (14%)	7 (50%)	5 (36%)
Be flexible and responsive to students' needs during instruction	0 (0%)	0 (0%)	0 (0%)	7 (50%)	7 (50%)
Be a reflective practitioner	0 (0%)	0 (0%)	0 (0%)	5 (36%)	9 (64%)
Communicate meaningfully with families	0 (0%)	0 (0%)	1 (7%)	9 (64%)	4 (29%)
Form positive relationships with cooperating teachers	0 (0%)	0 (0%)	0 (0%)	4 (29%)	10 (71%)
Serve as a strong advocate for children and families	0 (0%)	0 (0%)	0 (0%)	5 (36%)	9 (64%)
Understands standards to plan effective lessons	0 (0%)	0 (0%)	1 (7%)	4 (29%)	9 (64%)
Find resources for all students	0 (0%)	0 (0%)	0 (0%)	4 (29%)	10 (71%)
Create an environment of positive rapport	0 (0%)	0 (0%)	0 (0%)	4 (29%)	10 (71%)

N=14

service teachers (72%) agreed or strongly agreed they could manage student behavior; eleven candidates agreed or strongly agreed they could respond appropriately to student misbehavior. Twelve pre-student teachers (86%) agreed or strongly agreed they were confident in the following categories:

- Understanding content to plan effective lessons
- Asking a variety of questions to make students think and apply
- Creating quality assessments to evaluate student learning

Thirteen candidates (93%) strongly agreed or agreed they were confident in four areas:

- Designing formative assessments
- Creating environment of respect and rapport
- Communicating meaningfully with families
- Understanding standards to plan effective lessons

Fourteen pre-student teachers (100%) strongly agreed or agreed they were confident in all 14 remaining categories.

OPEN-ENDED QUESTIONS

In response to the first open-ended question, all 23 candidates believed they made a difference in children's academic performance. Interestingly, however, when asked how they knew they made a difference, pre-service teachers who participated in the traditional pre-student teaching (PSII) experience noted, "Students told me before I left as well as my co-op and the students themselves." And, "...they told me and the teachers told me." One candidate remarked, "I could feel the students wanting to learn and their engagement during my lessons." Only one traditional PSII pre-student teacher's response included an increase in grades.

Candidates who participated in the rural and urban Professional Development School (PDS) experience were required to conduct a Three-Student Project (3SP) (Tidwell, 2009). The 3SP is a data-based method of identifying and resolving children's academic and/or behavioral issues. The 3SP requires collaboration between a pre-service teacher, classroom teacher, university faculty member, and when possible, a child's family member, in order to remediate or enrich students in need. Steps in the 3SP process are 1) assess and analyze data 2) identify three students 3) design a plan 4) work the plan 5) monitor the progress and 6) be accountable. Candidates in the PDS PSII models responded with answers that were data-based. Comments included, "...have data on their writing

that shows progress from the beginning of the year," "Through the 3SP I have watched my students grow socially, emotionally, and academically," and, "Through tracking data in my 3 Student Project and seeing growth over time; post assessments reflecting students' learning and understanding from my instruction." One candidate said, "Through formative and summative assessments as well as Three-Student Project data."

All nine traditional PSII pre-service teachers believed they made a difference in children's behavioral progress. One student responded, "I know I made a difference because I noticed a difference in children's behavior." Other comments included that the teacher pointed out that the children listened better and the candidates, themselves, saw a difference in children's behavior. Eleven of the fourteen PDS PSII pre-student teachers perceived making a difference in children's behavior; three perceived they had not made a difference. PDS candidates who perceived making a difference, once again, cited the use of data. For example, one pre-student teacher said, "I implemented a behavior plan and through data could see his improvement." Another stated, "My student's unwanted behaviors decreased significantly" indicating data collection had occurred.

The next question addressed the connections between coursework and the field placements. Eight of the nine pre-student teachers participating in traditional placements and thirteen of the fourteen PDS candidates perceived making clear connections between their University coursework and practice. Science units were mentioned as being taught in their actual classrooms, classroom and behavior management techniques were utilized by pre-student teachers in all settings, and detailed lesson plans were written in all placements. One of the candidates in a PDS setting noted that she was able to use strategies learned in a literacy course for phonics instruction.

DISCUSSION

High stakes testing has placed heavy burdens on school systems and teacher accountability. This movement was federally initiated on January 8, 2002 when then President Bush signed into law the No Child Left Behind (NCLB) mandate. A major tenant of NCLB is an emphasis on accountability of student achievement measured by summative test results. Preuss (2007) has identified key ideals that have resulted from the passage of NCLB: "1) the use of data to measure student learning and program effectiveness 2) public accountability for student learning by reporting out data 3) organizational and professional consequences for student failure to learn

4) the use of student learning data to improve learning results and 5) data-based decision making” (p. 3).

In addition to the pressures of high stakes testing and expectations for teaching and student learning associated with NCLB, new teachers are in the process of acclimating to the profession, the school system, school and political structures, as well as students and colleagues.

Thus, new teachers feel the weight of both high expectations and the burdens of being new to the profession and teaching environment. Having confidence moving into student teaching may result in higher confidence levels when new teachers begin teaching in their own classrooms. It was clear from the quantitative data that the PDS pre-service teachers had higher levels of confidence than the non-PDS participants.

In this study, although all 23 candidates surveyed believed they had made a difference in student performance, student teachers who participated in a PDS model expounded on this belief by pointing to data points in student achievement, while traditionally placed PSII candidates relied on subjective reporting from co-operating teachers or as determined by the candidates themselves. The use of the 3SP used only in the PDS model may have been a factor in the tracking of and focus on goal setting and student progress data collection and monitoring. The data tracking on the individual student level is aligned with the way the state and federal government tracks student progress not only by individual students, but also on grade level, school and school district as required under NCLB. Likewise, candidates involved in the 3SP must review student progress data numerous times and engage in reflective thinking. Dewey (1933) defines reflective thinking as “turning a subject over in the mind and giving it serious and consecutive consideration.” Further, Dewey maintains that reflective thinking allows action in a “deliberate and intentional fashion” (p. 3).

The uniqueness of the 3SP for PDS candidates provides a platform for reflective thinking by requiring work with student data in regard to planning instruction to support specific student learning goals aligned with NCLB. Making a difference in student achievement in this model is based on data, not simply a belief or feeling that students are progressing.

Confidence in managing student behavior also emerged as an issue with both PDS and traditional candidates. Rosabeth Moss Kantar (2004) defined confidence as “the bridge connecting expectations and performance, investment and results” (p. 3). Although most pre-student teachers reported making a difference in children’s behavioral progress, the traditional pre-service teachers commented knowing how they performed through the comments of others, like co-operating teachers, while PDS pre-student teachers based perceived changes in student behaviors on data, sometimes tracking changes in student behavior. The PDS candidates linked their performance to objective results of changes in student behavior, which could explain their confidence in classroom management skills.

IMPLICATIONS FOR FUTURE RESEARCH

Several implications surfaced for future research:

1. Acquire a larger sample by administering the surveys over a multi-year time period.
2. Survey pre-student teachers from other universities who have traditional and PDS field experiences.
3. Follow-up the Qualtrics surveys with interviews in order to gain a deeper understanding of candidates’ responses.
4. Use Iqbal and Mahmood’s (2010) Stage method and survey confidence levels at various stages during the field placements.
5. Flush out the rural PDS data and the urban PDS data and compare results.
6. Compare the difference between responses from candidates placed in Early Childhood classrooms from those placed in Special Education settings.

LIMITATIONS OF THE STUDY

As with most small studies, this one had several limitations. First, due to the small sample size the results cannot be generalized. Next, candidates self-reported their responses which could have resulted in personal biases. And finally, the survey was distributed after final grades were posted; therefore, pre-service teachers’ self-confidence could have declined as a result of a lower grades in the field experience.

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Appendix A

Survey Instrument

Please select the correct answer from the dropdown menus to illustrate your PSII experience:

Select one:

I was placed in an early childhood classroom (PreK-Grade 4) _____

I was placed in a special education classroom (PreK-Grade 8) _____

Select one:

I was in a traditional PSII placement _____

I was in an Urban PDS placement _____

I was in a local PDS placement _____

Please complete this section of the survey based on your perception of your preparedness moving into student teaching.

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
	1	2	3	4	5
1. I am confident I understand content and standards necessary to plan effective lessons for student teaching.					
2. I am confident I can use knowledge about students in my student teaching placements to write lesson plans based on their needs.					
3. I am confident I can prepare instructional materials and find resources for lessons for all students.					
4. I am confident I can design formative assessments that will help me plan and execute lessons.					
5. I am confident I can create an environment of respect and rapport in my field placement.					
6. I am confident I can facilitate student interaction with other students.					
7. I am confident I can manage student behavior in my student teaching placement.					
8. I am confident I can respond appropriately when a student misbehaves in the classroom.					
9. I am confident I can give clear directions and students will understand procedures during my lessons.					
10. I am confident I have excellent written communication skills.					
11. I am confident I have excellent verbal communication skills.					
12. I am confident I can ask a variety of quality questions to make students think and apply content.					
13. I am confident I can facilitate student participation.					
14. I am confident I can engage students in hands-on learning activities.					

15. I am confident I can create quality assessments to evaluate student learning.					
16. I am confident I can be flexible and responsive to students' needs during instruction.					
17. I am confident I can be a reflective practitioner who understands my strengths and ways to improve.					
18. I am confident I can communicate meaningfully with families about their children's progress.					
19. I am comfortable with my ability to form positive relationships with my cooperating teachers.					
20. I am confident that I can serve as a strong advocate for children and families.					

Please complete this portion of the survey based on your experiences in your PSII field placement

1. During PSII, do you believe you made a difference in children's academic progress?
If yes, how do you know you made a difference?
2. During PSII, do you believe you made a difference in children's behavioral progress?
If yes, how do you know you made a difference?
3. During PSII, do you believe you were able to make clear connections between your IUP coursework and your field experience?
If yes, give at least one example of how you made a connection.
4. What are you looking forward to as you move into your student teaching experience?
- 5.
6. What concerns or apprehensions do you have as you move into your student teaching placement?

The Effectiveness of Peer Review and Preparation of Teacher Candidates for the edTPA

Dia Gary
Kirk Mathias

Abstract: Currently, limited research has been conducted examining the effect of peer review on preparing teacher-candidates for standardized assessments. Peer review is often an integral component of providing feedback to enhance depth and rigor in academic writing. This study analyzed the impact on student learning by utilizing peer review as a formative assessment tool. Two similar populations were included to represent the sample of participants, all attending a capstone senior requirement class at a four-year institution of higher learning. The control group was instructed in absence of formative assessment from peers. The experimental group received the same instruction with the addition of formative assessment in the form of peer review. Success of peer review was based on the comparison of edTPA scores, a consequential performance evaluation for teacher candidates. The conclusion of the study showed that peer review did not make a significant difference in edTPA scores.

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Keywords: edTPA, formative assessment, high-stakes, peer review, capstone, higher learning institution, teacher-candidates

INTRODUCTION

Improving rigor and intensity of instruction in teacher education courses is and has been a primary goal for many institutions of higher education in recent years. According to Lund (2011) many universities have analyzed scores on high-stakes assessments to determine instructional quality and faculty effectiveness as evidenced by the passage rate of teacher candidates on high-stakes consequential performance exams such as the edTPA. Currently there are 647 Educator Preparation Programs in 35 states and the District of Columbia participating in edTPA (AACTE, 2015). Consequentially those states do not allow an initial teaching certificate to be issued without an obtained passing score on the edTPA. The required evaluation is a performance assessment process for teacher candidates to demonstrate three core classroom functions of planning, instructing, and assessing student learning. It was adopted as part of education reforms focusing on placing highly qualified teacher candidates in their first classroom ready to teach. Successful passage of the edTPA is one of several evaluative methods to certify that teacher candidates are equipped with the tools and knowledge from the start

(Gary, 2015). Because the edTPA is such a high stakes assessment multiple websites share tips and self-help techniques to assist teacher candidates in successful passage of the edTPA. Such procedures include student seating arrangements, planned organizational procedures, and time of year the portfolio is completed (Jette, 2014). However, strategies to increase pedagogical learning for teacher candidates may be as simple as implementing peer review as part of a course structure. Lundstrom and Baker (2009) found that students improve their own reflective writing by reviewing the written expressions of peers. They concluded that when students gave formative feedback about a colleague's writings, personal written reflections improved. Wessa and DeRycker (2010) also corroborated that those who participated in peer review realized that their own works evolved into a deeper, richer, and greater reflective expression of their cognitive processes and reflective learning. Resulting from unsustainable workloads for faculty, Moore and Teather (2013) utilized peer review and peer feedback to ensure that students received formative evaluations on their first assignments so that second assignments were improved. Results indicated that students who began the peer review process approached it with a sense of

anxiety and hesitation. However, towards the end of the semester students expressed positive attitudes towards the implementation of peer review. Moreover, Lombardi (2007) posited that peer review was an authentic avenue towards formative assessment. She ascertained that classroom learning should reflect the “real” world, and not an artificial irrelevant environment. Additionally, McKeachie (2002) reinforced the notion that peer review often strengthened the reviewer’s own reflective writing and understanding of assignment standards. The students’ by virtue of reviewing a colleague’s work developed a deeper understanding of the writing process, thus improving their own submissions. However, on the other side of the coin even though research gives evidence that peer review will enhance learning, students often expressed that peer review was not always equitable. According to Mulder, Pearce and Balik (2014) students showed frustration that peer review lacked quality. Students were also afraid that they would not be able to competently conduct a peer review. Those students who had conducted a peer review complained that “peers” did not take the formative assessment strategy seriously and did not evaluate with precision and quality.

PURPOSE OF THIS STUDY

The purpose of this study was twofold. First was to determine whether there was a significant difference in edTPA scores between teacher candidates who used peer review in a teacher preparation-culminating course and those who didn’t. Second was to determine the level of value that participants placed on peer review.

METHOD

Participants

Participants included 25 (i.e. 21 female, 4 male) undergraduate students in their senior year of the teacher preparation program of Elementary Education. Ages ranged from 21- 55. The ethnicity/race distribution was 44% Hispanic and 56% Caucasian. The treatment of peer review was randomly assigned to one of the two classes. All participants registered for the required senior capstone course. Group1 included 15 students and group 2 included 10 students. All participants had full time jobs and attended the capstone course during the evening hours. Group 1 was the control group receiving instruction and feedback exclusively from the instructor. Group 2 received the same instruction and feedback from the instructor with the addition of feedback through peer review from colleagues.

Procedures

The same professor instructed the participants in both groups, using identical training and sample materials provided by the Stanford Assessment Center for Assessment Learning and Equity (SCALE). The materials included edTPA handbooks of literacy and math as well as “Making Good Choices” a guide for preparing for the edTPA. The students also had access to the 18 rubrics that were used by external reviewers when assessing the portfolios. The edTPA data compared in the research was data secured by the main campus of the university. Human Subjects approval was secured for the study.

All performance assessment (edTPA) data was collected from Pearson Publishing Company who has reported a reliability estimate of 0.917. The participants were enrolled in a capstone class during the quarter prior to their student teaching. The experimental group was conducted in a seminar fashion where the students participated in a “mock TPA” writing lesson plans, instructing peers using their designed lesson plans, and following the appropriate Common Core Standards with written reflections based on the scoring rubrics provided by the Stanford Center for Assessment, Learning & Equity (SCALE). In addition there were structured blocks of time where colleagues evaluated their peers’ submissions, graded them using the 18 rubrics supplied by Pearson, and provided constructive feedback on how the submissions could be improved. The instructor conducted the final review after all colleagues and peer reviews were completed. The control group followed the same format. However, the control group did not participate in reviewing any of their colleague’s submissions. Essentially the students in the study worked individually to design a lesson plan designed for students in K-5th grade. They implemented the lesson by teaching peers in a simulation who “pretended” to be a classroom of elementary aged students. The simulation was video taped with required written reflection on the lesson segment using the official edTPA scoring rubrics. Focally it was a trial run of the “real thing” that the participants would replicate during the student teaching field experience. Students in both groups were instructed to investigate the Common Core Standards choosing an appropriate standard in either literacy or math directed toward the appropriate grade that they were targeting. Each student developed a lesson segment of 3-5 lessons using a university-designed template. On successful review of the lesson and acceptance by the instructor the participant taught one lesson segment to a group of three peers, which included videotaping. The control group (2) followed the same procedure with the exception of

peer review. In essence, for the experimental group there were four peer review sessions with their submissions being reviewed by four separate colleagues who were randomly chosen by the professor. The colleague review time was part of the class structure and up to two hours was provided for peer review completed in the three hour once a week class. The control group (1) received no additional instruction but were allowed the two hours of class time to construct their submissions which were evaluated solely by the instructor.

RESULTS

The percentage of sample was similar although small in number with the treatment group ($m=$, $f=$) and control group ($m=$, $f=$) n 's of 10 and 15 respectively. The treatment group ($M = 39.050$, $SD = 8.31$) was lower than the control group ($M = 43.6$, $SD = 7.70$). However, it was revealed with an independent t-test that there no significant difference $t(23) = 1.403$, $p = .828$ in edTPA scores between the groups. Further the question as to whether there was a difference in scores by tasks outlined in the edTPA was examined. The edTPA includes assessment on eighteen rubrics that are divided into three categories (i.e. planning, instructing, and assessing). An ANOVA was run to determine whether there was a significant difference between the groups on planning $F(1, 23) = 2.722$, $p = .110$; instructing $F(1, 23)$, $= 1.230$, $p = .279$; and assessing $F(1, 23)$, $p = .342$.

Survey Results

All participants completed the survey with the question; *is peer review a valuable formative assessment tool for university students?* Since the control group (1) did not participate in peer review a brief description entailing peer review as a formative assessment tool was discussed before they completed the survey. Several voiced that they had experienced peer review in previous university classes. The results were varied with 72% of participants commenting that they did not feel

their colleagues worthy or experienced enough to give credible feedback. Moreover, 28% stated that they felt that peer review was a valuable formative assessment only if their reviewers were prepared to give honest feedback. Comments included "I only felt that one of my reviewers took the time to critically look at my work. In my opinion the other reviewers did not take the process seriously." Additional comments focused on expressions such as "when I peer reviewed my colleagues work, I was afraid to comment honestly for fear that I would lose a friend." These sentiments are congruent to research conducted by, Brammer and Rees (2007) who reported that only 34% of participating students with a sample of 328 students valued in-class peer review as a formative assessment to improve their learning. In a similar study Moore and Teather (2013) found that students valued working together, but did not enjoy their peer's remarks to be used in a final evaluative grading process.

CONCLUSIONS

Some research indicates that peer review has been found to positively impact the reviewer's reflective writing, assignment standards (Lombardi, 2007) and depth of understanding (McKeachie, 2002). Little research has been completed reviewing the effect of peer review on standardized assessments high stakes assessments. In examining the findings from this study, one could cautiously conclude that peer review has no impact on these high stakes scores. However, it should be noted that given the small sample size, a larger mean difference would have had to been shown in order to conclude statistically, that peer review has no effect on the standardized assessments. Additionally, it should be noted that even without a statistically significant difference, there was a large difference in mean scores between the control and treatment group. The peer review group scores on the edTPA were approximately 4.5 points lower than the control group. This might appear to be contrary to research indicating that peer review results in deeper reflective writings. However,

Table 1. Descriptive Statistics by Group and Task

Task	Control			Treatment		
	n	X	SD	n	X	SD
Planning	15	3.08	.5267	10	2.69	.6402
Instructing	15	3.02	.5361	10	2.78	.5203
Assessing	15	2.62	.6527	10	2.34	.7834

the standardized assessment used for this study is designed to assess more than just reflective writing. In fact, the edTPA is designed to assess the full teaching cycle. It might also be argued that incorporating peer review into a non-authentic teaching environment may not be appropriate for improving the scores on the standardized assessment designed to assess a real world teaching experience. Results of this study might also reflect on a process that is often received negatively. This would be consistent with Mulder et al., (2014) who found that students are often unhappy or frustrated with their peer reviews. It is recommended that more studies with larger participants be completed to examine the appropriateness of peer review in preparing teacher-candidates for high stakes assessments.

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The Role of Customer Service in Teacher Education Programs

Sheryl Venable
Alanna Bowie

Abstract: In the past, colleges were awarded funds based on the number of students entering each semester. The trend has now moved toward a system in which funding is based on several factors including retention. This paper will focus on retention and ways that customer service might improve retention, particularly in teacher education programs. Retention, in this context, pertains to students who enter an institution and are awarded a degree by that institution. Because of the retention issue as well as the teacher shortage, it is imperative that teacher educators incorporate customer service practices. Such practices can be used to assist students of various races and ethnicities, students with financial issues, and first generation college students.

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Keywords: customer service, customer-centric, academic customer service, retention, attrition

INTRODUCTION

According to The National Conference of State Legislatures (2105), colleges were formally funded according to the number of students enrolled at the beginning of each semester. Therefore, colleges had a desire to make sure adequate numbers of students were enrolled each semester but not necessarily a desire to make sure these students completed their programs. This means that a college or university might have an adequate number of starters but an inadequate number of completers. In fact only 59% of students who began a bachelors degree in 2007 completed a degree in 2013 (U.S. Department of Education, 2015). The problem is that students who only obtain a high school diploma tend to earn lower salaries than those who obtain advanced degrees (Hagedorn, 2006). They are also more likely to face the possibility of not being able to obtain employment (O’Keeffe, 2013). For these reasons, students who complete college are more likely to benefit themselves as well as society. According to O’Keeffe (2013), reasons most students begin but do not complete college are related to race, ethnicity, socioeconomic

status, and first generation college student status. This article shall focus on the teacher’s role in enhancing retention, which is directly related to customer service.

LITERATURE REVIEW

Customer Service

According to Kaufman (2015) customer service means that the customer (student) is provided with what he or she needs. Kaufman documents the following example related to a restaurant: Consider a waiter who needs to serve customers at two tables. At one table is a businessman who plans to complete a report and at the other table is a family on vacation. Good customer service for the businessman would be to provide him with what he wants and let him work. Good customer service for the family might be to engage in small talk and provide the kids activities while the family’s order is being prepared. Customer service must therefore be tailored to the customer. This concept is corroborated by Singh (2014), who refers to the personalization of

customer service as “customer-centric;” thus specifying that the customer is the center or the cornerstone essential for building a business.

Raisman (2009) uses the term academic customer service, which means that there is a concerted effort of treating students as if they are important members of the institutional team. He states that the same effort institutions put forth to attract students should be used to retain them.

RETENTION OF COLLEGE STUDENTS

According to Hagedorn (2006), retention of college students refers to students who enroll and remain in college until their degrees are awarded. She refers to these students as persisters. Students who begin college but fail to earn degrees are termed dropouts or non-persisters. Such students may return later or transfer to another institution. This article will focus on students who enroll in an institution and remain at the institution until a degree is conferred.

There are many reasons retention is important. According to Raisman (2009), when students dropout due to financial or other issues, the institution loses funds from the students who no longer attend. Therefore, the possibilities of budget cuts and position cuts may occur. The students who no longer attend college may have to pay back loans for classes they have taken and failed to earn an advanced degree; thereby increasing the possibility of these loans not being repaid.

Lotkowski, Robbins, and Noeth (2004) address the importance advanced degrees contribute to the United States’ workforce. This was the main focus of the ACT Policy Report. As mentioned previously, students who fail to obtain education beyond high school tend to earn lower salaries than their higher educated counterparts (Hagedorn, 2006).

When large numbers of students withdraw from an institution, it is difficult for that institution to accomplish its goal of educating society (Heldman, 2008). An education allows students to develop into intelligent citizens who are able to positively contribute to society.

Race/Ethnicity

A retention inequality exists between various races and ethnicities. In 2013 persons between the ages of 25 and 29 who earned bachelor degrees were identified. It was found that 15% of Hispanics, 20% of African-Americans,

40% of Caucasians, and 58% of Asians earned bachelor degrees (U.S. Census, 2014). According to Blankenship (2010), some issues that hinder the retention of minority students include inadequate high school instruction, lack of family members or other role models who attained a college degree, and stress related to the academic environment such as registering for classes, and financial issues.

Socioeconomic Status

Students’ socioeconomic statuses can affect their ability to complete a program. Hicks, West, Amos, and Maheshwari (2014) identified changes in the management of Pell Grants as a contributor to the decrease in graduation rates in rural Virginia. A Pell Grant is a form of financial aid granted primarily to undergraduate students based on need. Because the amount of money awarded through Pell Grants has decreased, lower socioeconomic students find it more difficult to enter and complete a baccalaureate program. According to Quinton (2014), Pell Grants should be offered in the summer. His conversation with the president of Des Moines Area Community College (DMACC) revealed that students are more likely to complete their programs when they can move through their courses at a faster pace.

First Generation Students

Approximately 34% of incoming freshmen consist of first generation college students; however, only 73% of those students return to college the following academic school year (Lightweis, 2014; Stebleton & Scoria, 2012; Stuber, 2011). It is likely that first generation students live in a working-class family. Unlike their middle-class counterparts, working-class students are less likely to receive social (and financial) support from their parents because their parents do not have any personal experiences with higher education. This difference can impact the students’ ability to socially integrate into a higher education institution (Rubin, 2012).

In many cases, first generation working-class students tend to live at home excluding themselves from campus activities. Oftentimes they experience additional emotional and financial pressures from their parents (Lightweis, 2014). For these reasons, it is important for first generation students to personally connect with the faculty permitting them to help integrate and better equip the students for their college experiences (Rubin, 2012).

IMPLICATIONS

The data and research has shown that some students, for various reasons, do not complete their college educations following entry at a particular institution. Thus, a retention problem exists. This disturbing trend will only worsen if faculty and staff in higher education do not carefully plan and execute an intervention for at-risk students. This intervention is customer service.

To a great extent, the faculty at many colleges and universities advise students to help guide them to their pathway to matriculation. It is during the time of advisement that the faculty can utilize customer service skills and personalize their meetings with students. An added gesture of listening to students' concerns regarding their classes or experiences would help them recognize that they have formed personal connection with a key individual to the institution, thereby reducing their willingness to leave the college.

In 2013, O'Keefe identifies that a welcoming environment is one of the key components to student retention. At-risk students or non-completers are more apt to drop out of college when they do not have a sense of belonging. Students' overall college experiences increase when they believe that the faculty supports their social, academic and personal needs (Kelly, LaVergne, Boone, Boone, 2012). Therefore, it is becoming increasingly important for students to develop a sense of connectedness to their institution, particularly, if the institution wants to increase student retention (O'Keefe, 2013).

CASUAL FACTORS AND CUSTOMER SERVICE PRACTICES

In 2012, Millward, Turner, and Van Der Linden assert that all societal factors, including education, were negatively impacted during the global recession. It was during the recovery period that many governments were able to identify the significance of re-skilling and educating those individuals whose occupations were quickly disappearing (Millward, Turner, & Van Der Linden, 2012).

Sawchuk (2014) asserts that during the restructuring period, higher education missed the opportunity to recruit individuals seeking alternate employment. Unfortunately, with thousands of teacher lay-offs, the perception that education was no longer a sustainable career was assumed by too many potential candidates. Consequently, the impact of the global recession has yet to rebound interest in education careers. The

U.S. Department of Education's postsecondary data documents that enrollment in teacher preparation programs nationwide has decreased approximately 10% from 2004 – 2012 (Sawchuk, 2014). Additionally, teachers are leaving the profession prematurely, further emphasizing the need to recruit and retain potential teacher candidates.

For several years there has been an examination of causal factors regarding the on-going teacher shortage dilemma. Linda Darling-Hammond (2010) states that teacher education preparation is one of the major factors that influences teacher recruitment. However, as a result of the teacher shortage, many states have hired professionals from other occupations to fill open classroom positions. These new recruits are seeking certification through alternate avenues, and subsequently, are leaving the profession at a higher rate than certified teachers using the traditional route (Darling-Hammond, 2010).

Thus, the troublesome trend of losing potential educators will not correct itself without an applicable intervention and an unyielding compromise to properly prepare all candidates for the classroom. The practice of retaining teacher candidates may require that the faculty in education colleges extend themselves and include more customer service practices.

Within higher education, faculty members alike have an entrusted responsibility of educating, advising and encouraging students. Therefore, an advisement session is an excellent opportunity for faculty members to guide and address teacher candidates' concerns. During the advisement session, faculty could offer additional support to those students who express concern regarding the future of their education. The embedded customer service practice requiring all faculty members to reach out and reassure students should be a protocol of all higher education institutions.

Simple gestures of displaying a more caring attitude during advisement can increase students' emotional ties with the institution. The quality of the interaction must be genuine to sufficiently ensure that the students' feel welcomed and valued (O'Keefe, 2013).

Determining factors like race, ethnicity, socioeconomic status, and first generation college students would be adequately addressed by the attentive efforts from the faculty. Specific efforts to reach students of diverse backgrounds would include encouraging students to attend on-campus activities and events. Identifying diversity programs, art fairs, playwrights, and sporting

events are a few suggestions faculty could communicate with students. Additional customer service practices include talking with first generation college students about college life, informing students of the college's or university's activities that might be of interest to them, and making sure that students with financial issues are aware of financial services offered by the university. Other ways to assist students with financial issues might be to create a carpooling system to assist with transportation issues or assign students to sites (that fit criteria) that are close to where they reside. These common sense customer service practices would be the standard for providing teacher candidates with a greater sense of personal satisfaction, which can potentially increase retention rates in education programs.

CONCLUSION

Due to the issue of retention coupled with the teacher shortage in the field of education, it is imperative that teacher educators exercise customer service practices. In advising sessions teachers need to create welcoming environments for the students and display caring attitudes. Understanding issues related to race, ethnicity, socioeconomic status, and first-generation college students can inform faculty of ways to assist students in a manner that would increase their chances of earning a degree in an area of teacher education and positively contribute to society. Henry Adams stated "a teacher affects eternity; he can never tell where his influence stops." To maintain this cultured vision, education faculty must embrace customer service practices to attain and retain teacher candidates from various backgrounds ultimately improving teacher retention.

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Understanding the Schooling and Literacy Beliefs, Behaviors, and Self-Efficacy of Low-Income African American Families

Rebecca Short

Abstract: Educators need to have a better understanding of the home environment of low-income African American families in regards to schooling and literacy beliefs, behaviors, and self-efficacy. Student success can be linked to a teacher's understanding and implementation of these beliefs and behaviors in the classroom. The research in this manuscript will highlight the importance of these areas in relation to a child's success in the classroom as well as illustrate how low-income African American families incorporate some of the beliefs and behaviors in their own home.

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Keywords: low-income, African American families, identifying, schooling, literacy, beliefs, behaviors self-efficacy

INTRODUCTION

Educators tend to judge the credibility and diminish the literacy experiences occurring in low-income, African American homes because the experiences do not fit mainstream literacy practices (Compton-Lilly, 2008; Compton-Lilly, 2000; Compton-Lilly, Rogers, & Lewis, 2012; Slaughter & Epps, 1987; Whitehouse & Colvin, 2001). Lovelace and Wheeler (2000) determined many of these differences originate from language patterns, vocabulary, beliefs, and social interactions. Despite the assumptions, researchers have determined low-income African American families do support the literacy learning in the home.

Furthermore, the literacy and language difficulties children face in the classroom can be attributed to the discrepancy between home literacy experiences and school literacy experiences (Ladson-Billings, 1995; Morrow, 1995). For example, in some cultures learning is done by listening and children are taught to not question adults. Therefore, when teachers expect their students to ask for clarification or help, they are undermining certain cultural norms of their students (Compton-Lilly, 2009). Also, many teachers expect students to perform tasks individually. However, many low-income African American students experience literacy as a social event

within the home (Compton-Lilly, 2009). This involves reading, writing, and telling stories among family members, friends, and neighbors. Educators need a better understanding of these families, so they can better support parents in literacy learning in the home (Ordoñez-Jasis & Ortiz, 2006; Waters & Harris, 2009).

When working with different populations, educators should not assume families' utilize inappropriate practices because the practices are not equivalent to mainstream descriptions. Instead, educators should determine the appropriate practices low-income African American families conduct and connect these practices at school (Compton-Lilly, 2009). Incorporating social and cultural contexts that highlight diversity in the classroom can enhance literacy learning (Compton-Lilly, 2008; Compton-Lilly, Rogers, & Lewis, 2012). Therefore, we need to work with diverse families to critically understand their literacy practices and develop authentic relationships that will foster the communication between schools and parents and offer meaningful literacy activities to children (Compton-Lilly, Rogers, & Lewis, 2012; Elish-Piper, 1997; Whitehouse & Colvin, 2001). Schools can better communicate with parents by taking the time to fully understand the families' way of life. When researchers and educators begin to better understand low-income, African American families,

recognize cultural differences, and value the students' home experience, assumptions disappear and literacy practices within the home and classroom flourish (Compton-Lilly, 2004). Researchers have determined the appropriate parental behaviors, beliefs, and self-efficacy level that should occur in the home which can be found below under the schooling, literacy, and self-efficacy sections.

SCHOOLING BELIEFS AND BEHAVIORS

Certain parental beliefs and behaviors in the home have been linked to success in school (Spera, 2005). Schooling refers to the training, guidance, discipline, or achievement with regards to school or educational institutions (Kunzman, 2012). Parents who prioritize school achievement are more likely to enact behaviors that lead to high performance in the classroom (Astone & McLanahan, 1991; Spera, 2005; Wentzel, 1998). Determining what schooling beliefs parents have and which schooling behaviors parents enact in the home can help researchers and educators collaborate with families and improve academic achievement. Astone and McLanahan (1991) found parental beliefs and behaviors such as aspirations for educational success, supervision of daily tasks, monitoring of school work, and talking about school to have positive effects towards attitudes and achievement in school.

Parental beliefs can affect their behaviors regarding educational performance. Wentzel (1998) concluded parental beliefs are an independent and positive predictor of a parent's educational aspirations for their child. In 2007, Pomerantz, Moorman, & Litwack identified a relationship between parents' beliefs in their children's abilities to perform well in class, and the long-term educational goals they set for their children. Essentially, how parents think about their child's potential to do well in school influences their child's performance. If parents believe their children can succeed, then the children have a stronger sense of self-efficacy in education (Rutchick, Smyth, Lopoo, & Dusek, 2009). Adopting and internalizing beliefs and goals for their children are critical steps parents should take in promoting educational success (Wentzel, 1998). Spera, Wentzel, and Matto (2009) found all parents, regardless of ethnicity, have high educational aspirations for their children.

Similar to beliefs, parental expectations have significant effects on academic achievement (Lazar, 1981; Rutchick, Smyth, Lopoo, & Dusek, 2009). If parents have high expectations regarding their child's success

in academics, then the child is also likely to place a stronger emphasis on his or her academic achievement. Because of their parents' high expectations, the children understand educational success will result in positive feedback and other rewards. Also, parents who have higher expectations encourage their children more, thus, contributing to higher levels of interest, enhanced school achievement, and continued schooling.

Parental expectations can also be influenced by the parents' schooling level. Typically, parents' expectations regarding the amount of schooling their children will complete are primarily influenced by how much schooling the parent completed. Furthermore, parents' expectations for their child's school achievement may also be based on the parents' amount of schooling as well as other factors more directly related to the child (Baroody, & Dobbs-Oates, 2011). Britto (2001) also identified a significant correlation between maternal education and their children's literacy skills. Therefore, identifying the parents' level of schooling can give insight into their expectations for their children.

One of the primary behaviors parents can enact to better prepare their children for society is by communicating the goals they want their children to attain, the aspirations they want their child to fulfill, and the values they want their children to internalize (Spera, 2005). Spera determined the goals and aspirations parents set for themselves and their child influence their behaviors toward their children. These behaviors then influence their children's setting of academic goals, persistence in school, course enrollment, intellectual accomplishments, and attendance of college. When parents believe their children have the ability to succeed academically and communicate this to their children, they provide additional confidence and motivation to their children leading to educational success (Rutchick, Smyth, Lopoo, & Dusek, 2009). Spera (2005) also determined if parents communicate a strong appreciation for academic achievement, their children will probably be motivated to try harder in school to gain attention, respect, and other rewards from parents.

Parental behaviors related to authoritative parenting also have a significant impact on school performance and engagement (Steinberg, Lamborn, Dornbusch, & Darling, 1992). Authoritative parents not only exhibit the same behaviors they expect their children to portray, but they also, listen to, encourage, and set high expectations for their children (Baumrind, 1967). Authoritative parents also incorporate effective practices in the home such as cognitive stimulation, valuable interactions, and positive discipline techniques. In return, these practices

result in high academic achievement; thus, these practices are important behaviors parents should enact in the home (Dutch, 2003).

Low-income, African American families have similar beliefs and behaviors regarding schooling. Drummond and Stipek (2004) conducted a study to obtain information on low-income parents' beliefs about schooling. Two hundred and thirty-four second and third grade children's parents were interviewed, and the researchers stated many of the parents valued their child's learning and believed they should facilitate their child's success in school. The low-income parents also viewed success in school as part of a larger context meaning they should develop strong relationships and stay safe. Overall, the parents viewed school as a viable resource and important supplier of information needed to succeed in society.

Focusing on low-income African American and ESL parents with low performing students, Dudley-Marling (2009) identified parents' perspectives on school and home literacy practices among school-age children. Although the parents perspectives did not coincide with traditional literacy practices in the home, Dudley-Marling did determine the parents were committed to their children, their education, and learning to read. The parents stressed the importance of resilience and how school can give their children a better life. Similar to other studies, the parents were focused on their children's future and expressed their beliefs of how having an education will lead to success for their children (Compton-Lilly, 2004; Compton-Lilly, 2000; Dudley-Marling, 2009). Parents consider "staying on a child" and keeping them "on track" as important aspects of a nurturing and caring relationships (Compton-Lilly, 2000). African American families did not feel it is only the school's job to teach their children (Samaras & Wilson, 1999). Despite assumptions, parents in diverse families do have an interest in their child's education and learning at home (Compton-Lilly, 2004).

Certain parental beliefs and behaviors regarding schooling can lead to educational achievement. Regardless of race or socioeconomic status, children of parents who define their beliefs and expectations, establish what behaviors are important, and vocalize these to their children are better prepared for and more likely to succeed in school (Cohen, 1987). Thus, identifying the schooling beliefs and behaviors of parents can help researchers and educators better understand the home environment and the possible educational success level of the children.

LITERACY BELIEFS AND BEHAVIORS

Specific parental beliefs and behaviors are linked to literacy achievement. Literacy refers to the ability to read, write, listen, speak, view, and visually represent ideas (Sigel & McGillicuddy-De Lisi, 2002; UNESCO, 2005). Cultivating these skills in the home as well as in the classroom is important for academic success. Understanding the literacy beliefs and behaviors occurring in the home can help researchers and educators work with parents and students to create a more conducive learning environment.

In a five-year longitudinal study, Senechal & LeFevre (2002) studied how parental involvement in literacy can have a huge influence on children's academic achievement. At the beginning of the study, children were in kindergarten, and by the end of the study, the children had completed third grade. Senechal and LeFevre found a clear link from home literacy experiences to later reading achievement. Achievement in receptive language was positively related to storybook reading and exposure to print, while formal literacy activities such as the parent acting as the teacher were linked to an increase in development of early literacy skills. Senechal and LeFevre also stated parents' knowledge level can indirectly relate to later vocabulary and listening comprehension skills, while the parents' at-home teaching abilities can also affect later achievement. Certain parental literacy behaviors are also linked to high achievement. Specific reading behaviors such as asking questions and communicating positive statements to children can facilitate literacy development (Burger & Landerholm, 1991). Also, parents who read with their children and engage in dialogue with them about story concepts facilitate literacy development. These literacy behaviors also prepare children to read independently and succeed in school (Bauman & Wasserman, 2010). Many exposures and experiences with print before children enter formal schooling are beneficial. Therefore, strong parental engagement in these literacy behaviors is good a foundation to literacy development.

Baker and Schner (2002) sampled low income and middle income African American and European American first grade children and their mothers. One of their goals was to examine the relationship between motivation and parent's literacy behaviors and beliefs within the home. One major finding was parental behaviors were more important than parents' income level in regards to children's motivational level. Despite the financial hardships low-income families might face, educational motivation does not differ across income levels. Also, the quality of the literacy experience was

more effective in developing the children's motivation than the frequency of literacy experiences. Baker and Schner define the literacy experience by the frequency of reading within the home, individuals involved during the reading, and visits to the library. The researchers determined low-income children were more likely to participate in shared reading with another child rather than an adult. However, shared reading between the child and parent produced more positive effects. They also stated parents who continually expressed reading for pleasure have a more positive effect on influencing their child's motivation. Parents who believed their children were interested in literacy activities and acted on this belief had children who considered themselves more competent readers.

Attempting to better understand the low-income African American population, Compton-Lilly (2004, 2009, 2011, & 2012) visited a variety of aged children's homes to identify appropriate parental literacy beliefs and behaviors. She determined many of the homes had plenty of reading materials such as newspapers, magazines, mechanical books, science fiction, love stories, and cable books. Parents were also persistent on setting a good example by having a thoughtful attitude about literacy. Low-income African American parents reported reading simple readers, using flash cards, working with phonics programs, and using computers and video technology during their childhood experiences. The most common approaches to literacy in the African American home were sounding out words, repetition, and practice. For example, parents made their children write words five times and use flash cards for learning sight words and vocabulary. Parents also created phonics, spelling, and reading games to help their children perform better in the classroom. These families frequently sang the alphabet song or used the closed caption on television shows to read (Compton-Lilly, 2004). Dictionaries and computers were also popular literacy resources used among the low-income African American families (Compton-Lilly, 2004).

Shared reading is another popular literacy practice seen in low-income African American homes (Compton-Lilly, 2012). Children are regularly involved in reading with parents, siblings, and other relatives and friends. The primary reading materials in the home are series books, magazines, school books, mail, newspaper ads, and media related materials (Compton-Lilly, 2000; McCarthy, 1997). Parents also use environmental print such as road signs, store signs, and labels in the grocery store to involve their children in shared reading.

In 2012, Lynch interviewed low-income African

American parents on the types of literacy activities they engage in at home. Over 95 percent of the parents reported reading stories to their children with 86 percent of them reading daily. Typical reading activities involved reading environmental print such as billboards and street signs. Parents also reported reading game boards, cereal boxes, and mail to their children. Many of the parents believed writing activities were also important engaging their children in writing activities daily such as writing the children's names or the alphabet.

Bracken and Fischel (2008) also examined the reading behaviors of low income, African American families. The researchers wanted to look past socioeconomic status and identify literacy practices occurring in the home and examine the relationship between these practices and children's early literacy skills. Fifty-four percent of the parents stated they read with the children daily, and 39% of parents stated beginning this practice before the age of six months. Forty-eight percent of the parents reported enjoying reading very much while 21% of the parents reported reading more than an hour daily. The researchers combined the behaviors of frequency and duration of shared reading, library visits, book ownership, and the child's beginning age of exposure to print to serve as Parent-Child Interaction. After results from a literacy assessment were analyzed, Bracken and Fischel determined a significant relationship between parent-child interaction and early literacy skills. Further analysis showed parent-child interaction was a stronger predictor of early literacy skills than family demographics. Therefore, identifying parental behaviors among families can help researchers and educators predict students' literacy abilities.

PARENTAL SELF-EFFICACY

Self-efficacy is a strong predictor of parental involvement in the home (Green, Walker, Hoover-Dempsey, & Sandler, 2007). Parental self-efficacy refers to a parent's measure of his or her own competence and confidence to complete certain tasks within the home (Bandura, 1989). Machilda, Taylor, and Kim (2002) stated efficacious parents view themselves as teachers at home and are more involved in learning activities and provide more stimulating learning environments. Parents with high levels of self-efficacy also implement behaviors that have positive long-term effects. Identifying parents' self-efficacy levels can help researchers and educators better understand the home environment and the amount of parental involvement in regards to learning.

Parents' perceptions of personal skills and knowledge

shape their ideas about the kinds of involvement activities they might undertake. Thus, the level of parental self-efficacy reflects the ability to parent effectively and development of achievement goals (Green, Walker, Hoover-Dempsey, & Sandler, 2007; Machilda, Taylor, & Kim, 2002). The range of activities parents see as important or essential for learning is affected by how parents view their role as an educator in the home environment (Bruckman & Blanton, 2003). Parents' beliefs and behaviors toward their children regarding schooling and literacy are influenced by how efficacious they feel (Machilda, Taylor, & Kim, 2002).

Interested in understanding low-income African American parents' level of self-efficacy with their school age children, Compton-Lilly (2004, 2009, 2011, & 2012) spent a multitude of hours interviewing and studying parents in this population. She determined these parents were insistent on being good teachers and setting a good example by reading and writing in front of their children (Samaras & Wilson, 1999). Along with Dudley-Marling (2009), Compton-Lilly discovered parents tried to be good teachers at home by explaining difficult material, and making sure homework was completed and understood. In the homes, parents engaged their children in reading materials of their choice, playing learning games, and using the computer (Compton-Lilly & Greene, 2011). Outside of the home, parents mentioned engaging their children in literacy practices such as reading road and store signs, and going to the public library to read or use the computer. With regards to teaching specific literacy skills, parents consistently read aloud to their children, demonstrated tracking while reading and taught how to use the dictionary appropriately. Parents also taught their children how to speak in different situations using the pragmatic language system. Overall, the parents seemed to take pleasure in pursuing an active role in teaching at home, and the children appeared to enjoy reading and writing.

Raikes and Thompson (2005) identified low-income mothers having high self-efficacy, which resulted in a more positive home learning environment. They also found high self-efficacy levels also reduced the stress levels due to low-income issues. Raikes and Thompson also concluded parents who felt more efficacious were better able to deal with parenting of young children and feel more in control of their lives. With such a strong link between parental self-efficacy and the child's success in school, identifying parental self-efficacy levels is critical to educators.

CONCLUSION

In predominately African American student classrooms, meaningful literacy activities incorporate the language and social aspect of their culture. Meaningful activities encourage students to use their language and cultural tendencies to acquire knowledge in the classroom without losing their identities. These activities increase African American students' motivation and desire to acquire knowledge (Williams, 2006). Ladson-Billings (2006) stated some teachers want to blame their students for not performing well academically and disregard any influence their family and community may have on a student's performance. Furthermore, teachers would rather associate students' failures to something internal rather than explaining how culture discrepancies between home and the classroom have created academic problems. Unfortunately, many teachers only have a surface understanding of their students' way of life (Ladson-Billings, 1995). Educators need to take action in better understanding their students' culture and home life to ensure their students will have a rewarding and successful educational experience.

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Theory to Practice: Quality Instruction in Online Learning Environments

Diane B. Marks

Abstract: While student demand for online learning has increased, faculty support for online learning contexts has not. Only 30.2 percent of the faculty surveyed “accept the value and legitimacy of online education” (Online Learning Consortium, 2014). University faculty members question the rigor, authenticity, and value to future employers in eLearning contexts. In this paper, I will examine the idea of quality in eLearning. I will utilize Michael Strong’s (2011) framework for defining quality teaching and apply those findings to eLearning environments. Bridging theory to practice, I will add descriptive examples from my own experiences as both an online instructor and an online student. Quality teaching is consistent across all delivery systems. However, the methods, materials, and strategies utilized for success are highly unique to each context.

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Keywords: Online Learning, Quality Instruction, Teacher Education

INTRODUCTION

Numerous reports, surveys and studies have shown that eLearning industry is gaining speed with increasing numbers of individuals, corporations, and institutions turning to eLearning as they recognize its effectiveness and its convenience. The global eLearning market is expected to reach \$107 billion by 2015. More than 6.7 million students (32 percent of total higher education enrollment) took at least one online course through a university during the fall of 2011 (Sheehy, 2013). As budgets get tighter and students look for both economic and flexible alternatives to traditional delivery systems, the demand for eLearning in higher education will drastically increase (Cain, 2013). Online learning enrollment has increased for the last ten years and schools are responding to the demand with 62.4 percent of colleges surveyed offering fully online programs (Sheehy, 2013).

All is not rosy in the eLearning environment. While student demand for online learning has increased, faculty support for online learning contexts has not. Only 30.2 percent of the faculty surveyed “accept the value and legitimacy of online education” (Online Learning Consortium, 2014). One barrier to faculty acceptance of eLearning is the idea of quality. University faculty

members question the rigor, authenticity, and value to future employers in eLearning contexts. Instructors want to continue to provide constructivist, rigorous, personalized, and authentic educational experiences to students and do not want to have an online program that is considered lesser quality than the program offered face-to-face.

In this paper, I will examine the idea of quality in eLearning. I will utilize Michael Strong’s (2011) framework for defining quality teaching and apply those findings to eLearning environments. Bridging theory to practice, I will add descriptive examples from my own experiences as both an online instructor and an online student. It is my contention that quality teaching is consistent across all delivery systems however, the methods, materials, and strategies utilized for success is highly unique to each context.

QUALITY TEACHING

Characterizations of teacher quality as discussed in the literature vary according to the interests and perspectives of the writer/researcher. The literature on teacher quality can be loosely grouped into four subsets: the qualifications of the teacher as a reflection of

competence (e.g., degree, quality of college, exam scores, certification, subject-matter credential, experience), the personal or psychological qualities of a teacher (such as love of children, honesty, compassion, fairness), the pedagogical standards that a teacher exhibits (use of certain teaching strategies, classroom management skills, establishment of a positive classroom climate), or the teacher's demonstrated ability to raise student learning (successful or effective teaching) (Strong, 2011).

Even though the literature consistently represents the characteristics previously listed for quality teaching, there is much debate over the measurement tool (Darling-Hammond & Youngs, 2002). In addition, the term *quality* is fundamentally value-laden, so that one characterization might legitimately differ from another, with neither one having more or less validity. Furthermore, the term *quality* is often used synonymously with other terms such as *master* or the adjectives *good* and *effective*, which themselves may have, under certain conditions, specific and narrower definitions. Teacher quality defined for this paper reflects those four groupings Strong (2011) found in his survey of the literature: Teacher qualifications, personal attributes, pedagogical skills and practices, and teacher effectiveness.

TEACHER QUALIFICATIONS

In 2001, the No Child Left Behind (NCLB) bill was passed and by 2005 all states were required to provide evidence that *highly qualified* teachers staffed each classroom. In most cases, schools provided front-end qualifications such as degree, quality of college, exam scores, certification, subject-matter credential, and experience (Strong, 2011). The thinking here was the assumption that teachers with the right kinds of qualifications would be more effective teachers.

The idea of teacher qualifications adding to future teacher success is also applicable to eLearning contexts. Online course developers and instructors who have a degree in online teaching and demonstrate effective practice through online teaching experiences are more successful in eLearning contexts. E-learning quality is often approached in terms of content, technologies, and resources, whereas quality is ultimately dependent on the decisions and behaviors of the teaching practitioners (Pei-Chen, Ray, Finger, Chen, and Dowming, 2008). A good example of this sentiment is my first hybrid course (I was the instructor) in 2008. Having taught the course in a traditional delivery system for years, I felt that the transition to hybrid instruction would be seamless. I was so wrong! The course was a disaster and I have no one

to blame but myself. I had no front-end qualifications to create and teach this course as a hybrid. I have a Ph.D. in Curriculum and Instruction and have spent most of the last two decades teaching students in a traditional delivery system. After this disastrous experience, I began to read, attend workshops, and enrolled in the eLearning Graduate Certificate Program at NC State. I found that these experiences have greatly informed my practice as an online instructor and, in turn, have improved student satisfaction and achievement in my online classes.

PERSONAL ATTRIBUTES

Defining teacher quality in terms of personal attributes is quite different than teacher qualifications. Teacher attributes are subjective and can be difficult to measure. Robert Walker (2008) conducted a meta-study of education majors over 15 years and found that there were twelve personal attributes that helped students to learn and succeed. These personal attributes are: Came to class prepared, maintained positive attitudes about teaching and about students, held high expectations for all students, showed creativity in teaching the class, treated and graded students fairly, displayed a personal, approachable touch with students, cultivated a sense of belonging in the classroom, dealt with student problems compassionately, had a sense of humor and did not take everything seriously, respected students and did not deliberately embarrass them, were forgiving and did not hold grudges, and admitted mistakes.

In the online learning context, these personal attributes are classified as teacher presence (Kelly, 2014). Numerous studies show that teacher presence in an online learning environment is critical. In fact, Welch, Napoleon, Hill, and Roumell (2014) created the Virtual Teaching Dispositions Scale (VTDS) to measure personal attributes of online instructors. The VTDS measures six attributes: openness to experience, intellect, conscientiousness, agreeableness, extroversion, and optimism. These attributes positively correlate to those measured by Walker (2008).

Teacher Presence was not a component I considered early on in my online teaching. I was one of those instructors who believed the success of an online course was based mostly on content, course design, and technology. It wasn't until I became an online student myself that I realized the importance of teacher presence. I agree with the research that defining teacher presence is very subjective and difficult. However, in my experience, the instructor utilized numerous technologies (video, discussion board, and email) to communicate with

students. The instructor who did this best did not overwhelm me with contact but kept his contact consistent, personal, intelligent and encouraging. These attributes also correlate to both the personal attributes and dispositions discussed by Welch et al. (2014) and Walker (2008). As I design new online courses and teach online, I consciously imbed strategies like weekly videos, and personal responses to discussion postings that keep my presence in the course evident for students.

PEDAGOGICAL SKILLS AND PRACTICES

Pedagogical practices are considered the foundation of traditional instruction. Pedagogical skills and practices are those instructors utilize when conducting instruction. Several educational reform organizations have issued guidelines defining quality teaching as, conducting instruction that engages students as active participants in their own learning and enhances the development of complex cognitive skills and processes (Strong, 2011).

As the understanding of online teaching and learning moves away from a philosophy of content delivery and assessment to a more constructivist philosophy, pedagogy moves front and center in the discussion of quality online instruction. Central in online learning contexts is the understanding that the learner must be active in their online learning experience. This is consistent with traditional delivery systems however, how active learning is created in the online learning environment is quite different from traditional methods. There are numerous pedagogical strategies that facilitate active learning in online environments (Tunks, 2012). Some effective pedagogies include technologies like Padlet, Voicethread, Bubbl.us, and Bitstrips where students utilize higher level thinking skills to apply and synthesize course content in a visual product. Even more student-centered and active online learning is now available in simulations and games. By maintaining systems of achievement, rewarding detail-oriented tasks and providing highly evolved character development systems, the gamification of any content “increases visibility and an awareness of the intricate. These flexible, digital systems promote the crafting and curating of incredibly complex processes, awarding reflection, analysis, metacognition, and social -- yet self-directed -- revision of thinking and behavior” (Heick, 2011).

I feel that this area is one of the last to change for eLearning. Part of the reason for the sluggish shift has been the technology. However, in recent years, technologies have improved to such an extent that now

online instructors have their choice of methods and strategies to promote quality teaching (Strong, 2011). It is quite a challenge keeping up with all of the new technologies as both an instructor and learner. I agree with the meta-analysis by Vanessa Vega (2013) that explains, successful technology integration should be seamless and promote those upper levels of the SAMR model (Puentedura, 2012). With all of the new technologies, it is often easy to jump on a bandwagon and leave students behind. I did this when I was first teaching an online course. I researched the latest and most engaging technologies for that time (Blogger, Wikki, and Google Sites) and implemented them in my course. This was a huge mistake! Students could not focus on the course content and became increasingly frustrated with the new technologies introduced each week. What I learned from this experience was that it is best to use technologies that are generally used by the students already since new and untried technologies can become a barrier to student learning. Now, I utilize those technologies in my everyday curriculum that are “tried and true” by most students. Using familiar technologies has enabled me to create student-centered activities that reflect a Constructivist philosophy. If I do want to utilize a new technology, then I introduce it within a low risk high support environment so students can gain experience with the technology before being asked to represent higher level thinking skills with the new content.

TEACHER EFFECTIVENESS

Teacher effectiveness is another characteristic that is difficult to measure. Gary Fenstermacher and Virginia Richardson (2005) make a distinction between *good teaching* (the worthiness of the activity) and *successful teaching* (the realization of intended outcomes). They make the point that *quality teaching* includes both good and successful teaching. Interestingly, the literature examining the measure of teacher effectiveness suggests differentiated models that allow for different indicators of effectiveness in different teaching settings.

The online learning environment is one of the different settings described in the literature. Online literature states that two components that must be present in a successful online learning environment are a sense of community and quality course design (Moore, 2014; Thorman & Fidalgo, 2014). Effective teachers in a traditional delivery system must construct quality lesson plans and nurture a sense of community in the classroom, eLearning instructors must do the same with the tools they have available to them.

Creating a sense of community in an online learning environment is difficult by the logistics alone. Distance education is desirable because students can learn from different locations at times that are convenient to their own schedules. This is a double-edged sword. It provides the flexibility students demand but without a sense of community, allows students to feel connected not only to their instructors and classmates but to the course content itself. A lack of peer connections will lead students to feel more isolated and stressed than those who are more active; exchanges with other students become vital for validating their experiences and for overcoming isolation (Moore, 2014).

There are many ways that online instructors can and do support engaging learning communities with their students. Many begin with an icebreaker activity of some sort to introduce students to each other. Other strategies for creating a healthy learning community are discussion boards, peer feedback for assigned projects, and collaborative assignments (Barber, Taylor & Buchanan, 2014; Moore, 2014). In recent years, video technologies have developed that allow for groups of students to “meet” virtually. Students enjoy Google Hangouts, Skype, and Facetime. These technologies are extremely helpful for students to connect to each other and the instructor. Finally, there are virtual classrooms like OpenQwaq where students and teachers can “meet” as Avatars in virtual schools and classrooms.

Online community is like a moving target and it takes a skilled instructor to negotiate the ups and downs online. In my experience as an online student, I have had some instructors who were masters in creating online community and others who really struggled to connect students with each other and the content. One of the best strategies I experienced as an online student was the instructor putting his class of nearly thirty students into smaller groups of four or five. These groups were consistent throughout the semester and all collaborative assignments were done in these groups. I really enjoyed getting to know my fellow group members and through discussion boards, collaborative projects, and peer evaluation, we had many positive and varied opportunities to build community. This was such a successful strategy that I would read or see something in my own life and think how one of my group members would feel about that concept, strategy or idea. It was an extremely effective strategy for making a large class feel small. In this example it is evident that the instructor used both *good* and *successful* teaching and was extremely effective in creating an online learning community (Fenstermacher & Richardson, 2005).

Curriculum design is also critical in teacher effectiveness. Both traditional delivery instructors and online instructors need to carefully consider their curriculum decisions and be skillful in creating a curriculum that is easy to use, customizable, uses a variety of large/small group and individual activities, and sets clear expectations for both student and instructor behavior (Boettcher, 2011; Strong, 2011). In a traditional delivery system instructors have the luxury of elaborating and explaining any curriculum ambiguities. Students can ask questions and get “just in time” teaching in each class meeting. In the online environment, students will feel isolated and frustrated with any ambiguities and can “turn off” if questions go unanswered for too long. Online instructors need to provide the same quality curriculum as their traditional counterparts but must utilize different methods, strategies, and materials to do so.

In my experience as an online student, there were several critical design strategies used by my instructors that greatly enhanced my experience in the course. First, I really appreciate a streamlined and easily navigated course website. I’ve had instructors do this by using an LMS to create books with course assignments listed within the chapters. This is a great strategy and eliminates the “scroll of death.” Also, being new to online learning, I liked when an instructor had an orientation book or video that helped me to better understand how to print chapters, find readings, and post assignments.

The literature about effective online instruction explains that predictability is best when creating the curriculum (Quality Matters, 2014). As an instructor I thought this would bore students but as a student, I really like the routine of when things are due and how/where to submit them. I transferred this experience into my own classes and course evaluations reported that students found the predictability of course assignments to be one of the biggest strengths in the course design.

Finally, I appreciate clear expectations for and descriptions of all assignments. In my own classes where I am the instructor, I also provide some student examples of the assignments. My students really appreciate samples of student work and I do think it is one more way to visually explain the assignment. In recent years, I have utilized screencasts for certain course content. Students report that they really like these because it shows them exactly what is meant by the directions and how to access course materials or use new technologies. I have even used screencasts for “just in time” teaching. If I get several emails asking the same question about an assignment or technology, I just create and post a screencast showing students what is meant by the

directions. Technology today is easy to use and share. This makes for a much quicker turnaround time for student questions. The ability to meet the needs of individual learners through various strategies and technologies increases both student satisfaction and student achievement. By any measure these strategies demonstrate both *good* and *successful* teaching and thus reflect the quality of online teaching.

CONCLUSIONS

Online learning is here to stay and the question is not whether one should adopt an online program or not but how can one produce an online program that reflects the quality of the traditional delivery system? Just as any other new idea, eLearning has gone through many growing pains and I feel it is stained with these past mistakes. University faculty members are reluctant to adopt online learning programs because of rumors they have heard, reports of bad experiences from both students and instructors, and an overall misunderstanding of the possibilities for quality online teaching. This paper clearly shows that ideas of quality teaching translate across delivery systems. The difference is in the context and how a skilled instructor utilizes methods, strategies, and materials to best meet the standards of quality teaching.

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I Wonder: Using a Semester-Long Inquiry Tool with Pre-service Teachers in an Early Literacy Instruction Course

Bethanie C. Pletcher

Abstract: This manuscript describes an instructional strategy used during an early literacy instruction course for pre-service teachers at a south Texas university. The Reading and Analyzing Nonfiction graphic organizer, or R.A.N., is Tony Stead's (2005) adaptation of the KWL chart developed by Ogle (1986). R.A.N. was developed as a learning tool for elementary aged children learning how to gather information from nonfiction texts. The instructor of this course has used the R.A.N. tool to peak and sustain undergraduate students' curiosity and as a model for them to use as future teachers.

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Keywords: inquiry, graphic organizer, early literacy, self-study of teaching practices

INTRODUCTION

When I ask my pre-service teachers if they remember using the ubiquitous “KWL” (What I Know, What I Want to Know, and What I Learned) chart (Ogle, 1986) when they were elementary school students, I usually receive a variety of responses, most of them lackluster. I then introduce the wonders of the RAN (Reading and Analyzing Nonfiction) tool that Tony Stead discusses in his book *Reality Checks* (2005). After this introduction, their thinking as related to comprehension instruction is forever altered in a positive way.

I teach a course titled, “Principles and Practices for Early Reading Instruction,” as part of my students' preparation to teach in early childhood through sixth grade classrooms. Our topics during class sessions include guided and shared reading, phonemic awareness and phonics, literacy assessment, early writing instruction, and early intervention, all as pieces of a comprehensive literacy framework in the pre-kindergarten to second grade classroom. Although the in-depth comprehension piece is relegated to the course in upper elementary grades reading instruction that the university offers, I want to make sure my students fully understand that reading is all about making meaning, from the very first books that children hear and read.

Undergraduate students enter our foundational reading courses with meager knowledge about the reading process, much of it derived from their personal experiences of how they were taught to read, and many do not even have recollections of that. While these experiences are extremely valuable, they are also often accompanied by some misconceptions in how children learn to read and how to go about teaching young children to read and write. On the first day of class, I expose them to the notion of the “tentative nature of [their] thinking” (Jaruszewicz, 2007, p. 373) and encourage them to use these misconceptions to spark questions. Hulbert (2012) says “an inquiry stance places all practices in harm's way, to be (re)explored and examined from multiple angles” (p. 108), and this discomfort creates an ideal learning situation because they are then motivated to read about and engage in class discussions about reading instruction. It is my intention that this progression of learning will carry over to their careers as teachers as they engage in research in their own classrooms (Hulbert & Knotts, 2012; Kiss & Townsend, 2012).

THE INQUIRY PROCESS THROUGH THE USE OF GRAPHIC ORGANIZERS

One way to promote inquiry in a course for pre-service teachers is to use a graphic organizer, as students find these visuals beneficial (Otto & Everett, 2013). Modeling the inquiry process by using graphic organizers provides pre-service teachers with an instructional strategy they can use with their future students. Kiss and Townsend (2012) remind teacher educators that “one of our primary responsibilities is to model and promote” practices such as these (p. 37). I take this one step further and use a graphic organizer as an interactive part of the course, rather than simply showing it to them as a “stand alone activity” (Jones & Jones, 2013, p. 81). By doing this, I am expecting that they will remember it and try it in their future classrooms.

Ogle (1986) developed the KWL graphic organizer (see Figure 1), which is meant to be used before, during, and after reading nonfiction texts. Before reading, students record what they already know (the “K”) about the topic to be studied. From here, the teacher guides students to record questions that they have (the “W”) so that their learning might be more focused. Lastly, after reading, students return to their questions to see if they were answered, and they record what they learned (the “L”). Although teachers have used this process wisely, some educators have reworked the original organizer. Szabo (2006) added two columns, “Head Words” and “Heart Words”, to further encourage students to develop their own questions during reading and develop vocabulary.

Tony Stead (2005) added two columns to the traditional KWL format and altered the labels in the other three columns so that the tool is more suitable for helping students organize their learning for any given topic (see Figure 2). This revamped KWL chart includes the following columns:

- What I Think I Know
- Confirmed
- Misconceptions
- New Learning
- Wonderings

Figure 1 Ogle’s KWL (1986) Graphic Organizer

What I Know	What I Want to Know	What I Learned

Figure 2 Tony Stead’s R.A.N. (2005) Graphic Organizer

What I Think I Know	Confirmed	Misconceptions	New Information	Wonderings

Before reading, students list “approximations of prior knowledge” (Stead, 2014, p. 492), in the “What I Think I Know” column, understanding that their knowledge of what is to be studied is tentative. During and after reading, in the “Confirmed” column, learners indicate if what they think they know has been validated through readings and/or lessons. This column gives students a “sense of success” (Stead, 2014, p. 492). Next, they move any incorrect information from the “What I Think I Know” column to a “Misconceptions” or “I Wasn’t Quite Right” column, provoking them to reconsider their prior knowledge. In the “New Learning” column, students record what they have recently learned and pieces of the text they deem as fascinating. Lastly, the “Wonderings” column is meant for students to pose questions for which they would like to locate answers both during and after reading. Rather than just asking questions before reading, as with the KWL, Stead encourages questions at all times because “...readers tend to raise more centered and appropriate questions during and after they hear an informational piece because their knowledge has been extended” (2014, p. 493). See Figure 3 for an example of a first grade classroom’s R.A.N. chart on the topic “Sun and Moon.”



Figure 3 A First Grade Class’s R.A.N. Chart

USE OF THE R.A.N. TOOL IN AN UNDERGRADUATE LITERACY INSTRUCTION COURSE

The R.A.N. organizer is an invaluable part of the early learning class sessions. I am ever searching for ways to capture and sustain my students' attention and peak their curiosity over the course of the semester. Using this tool helps me address this by using inquiry to drive my instruction, thereby holding students' interest and enticing them to want to learn more. My goal is to improve my instruction and my students' retention of new knowledge.

Throughout the semester, I provide my pre-service teachers with firsthand experiences, thus allowing them to become acquainted with concepts that are sometimes difficult for them to take on board. For example, we manipulate the materials that a teacher might use to teach children to hear and record sounds in words, we view videos that demonstrate how a teacher might provide a book introduction during a guided reading lesson, and we role-play to practice administering the tasks of the TPRI (Texas Primary Reading Inventory). It is not enough to tell them about reading instruction; there must be showing and doing as well. I could show them examples of the R.A.N. tool in action and discuss it while doing so. Instead, I decided to put it into action and demonstrate its use over the course of the long semester, as it is intended to be a living, breathing tool for learning. On the third class day of each semester, I introduce

the R.A.N. tool. I wait until this time because, as it is important when using R.A.N., students need the opportunity to build some background knowledge about early literacy. This way, when we begin with the "What We Think We Know" column, they have an adequate amount of information to contribute. We begin with a discussion about the KWL and how they remember its use in their own childhood classrooms or if they have seen it in practice during field observations. We ponder aloud the advantages and limitations of the KWL. Then I launch our class R.A.N. graphic organizer. Each class day following this initial discussion, I encourage students to add to the chart in some way. I am sure to place sticky notes on their tables and encourage them to either work alone, in partners, or in groups to add to something they have learned to the class chart. This sends the message that this R.A.N. chart belongs to them and that it serves the critical purpose of keeping track of their learning. The class chart (see Figure 4) houses all topics that are addressed in the course so that students understand that all topics are integrated and support literacy instruction. They might move a sticky note from the "What We Think We Know" column to the "Misconceptions" or "Confirmed" column. Subsequently, as their questions are answered, they move the sticky notes from the "Wonderings" column to "New Learning." As the semester draws to a close, we create more "Wonderings," or our questions that are left unanswered, together. This process "deepen[s] content understandings" (Stead, 2014, p. 492) and leaves students with a launch pad for their end-of-semester early literacy projects.

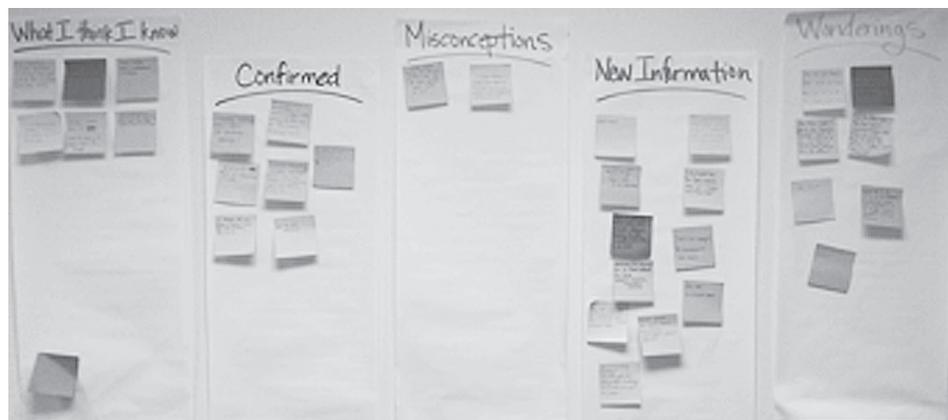


Figure 4 *Early Literacy Course R.A.N. Chart*

Here is an example of the progression of a concept as it moved from one section of the RAN chart to another. A student posted the statement, “You should create guided reading groups based on children’s reading levels” in the “What I Think I Know” column. After we spent several class sessions discussing guided reading instruction, she realized that her statement was partly a misconception and moved it to the “Misconceptions” column. She then created a new sticky note that read, “You should create guided reading groups based on children’s reading levels and reading strategies.” She placed this revised sticky note in the “New Information” column. See Table 1 for more examples of items placed on the chart during a semester.

Table 1 *Class Responses from the Class R.A.N. Chart*

What I Think I Know	Confirmed	Misconceptions	New Information	Wonderings
You should create guided reading groups based on children’s reading levels.	Children need to know how to turn pages, read left to right, and how to hold a book	You should create guided reading groups based on children’s reading levels.	You should create guided reading groups based on children’s reading levels and reading processes	How do you choose books for guided reading lessons?
During shared writing, the teacher and students share the pen	I know that phonics is no longer the thing that is most important in reading – there is fluency, comprehension, vocabulary	During shared writing, the teacher and students share the pen	Shared writing is different than interactive writing	How do you integrate reading and writing instruction?
Children need to know how to turn pages, read left to right, and how to hold a book			Meaning, structure, and visual features play a big role in picking the right book.	
I know that phonics is no longer the thing that is most important in reading – there is fluency, comprehension, vocabulary				

Every semester, students comment on the usefulness of the R.A.N. tool. The following are some of their observations about using this tool during the course:

- I love that we are getting to practice using the RAN strategy in class and are updating it periodically because it will make me more confident in the classroom knowing that I've at least practiced it before. Rather than reading about it and going into the classroom blind-sided and using it for the first time with my students.
- Being exposed to it now makes me comfortable and confident enough to teach it to my own students some day since I've seen firsthand how it works.
- I know the RAN chart will be beneficial to my students, and I am excited to use it. I also love how we have our own RAN chart set up in the classroom and we are able to write on it whenever we want.

FINAL THOUGHTS

There are several benefits for using the R.A.N. chart as part of this course. First, charts such as these allow students to make their thinking and learning visible, as it creates a record of how our knowing changes throughout the semester. Hulburt and Knotts (2012) mention the importance of "making inquiry public" (p. 100). Second, the leftover "wonderings" provide the

pre-service teachers with a focused path for inquiry on course topics. Lastly, by using this tool consistently, I am providing my students firsthand experience with it, so they may be more likely to use it with students in their future classrooms. Each semester, I plan on refining the use of this tool in not only this course, but in others as well. I would like my students to have more control over using this graphic organizer by encouraging them to use the first and last few minutes of each class session to manipulate their sticky notes while having thoughtful discussions about their learning. I also plan on bringing in more examples of R.A.N. charts from elementary classrooms.

Anders, Hoffman, and Duffy (2000), in discussing reading teacher education practices, were left wondering "what teacher educators should do to promote [reading process] learning" (p. 723). As one study (Kosnik & Beck, 2008) revealed, instructors of reading courses sometimes present many topics without building connections between them. This lack of cohesion makes it difficult for pre-service teachers to have "a sense of the 'big picture of literacy'" (Kosnik & Beck, 2008, p. 120). I felt pressed to examine my own practice (Anders, Hoffman, & Duffy, 2000; Kindle & Schmidt, 2013) and find a tool that I could adapt for my classes and use to help my students grasp the relationship between concepts about print, interactive writing, and shared reading, for example. Reflecting on my teaching has helped me improve the early literacy course at my university over two years, and will hopefully be a tool that other teacher educators "begin to use, build on, develop, adapt, [and] adjust" in their courses (Loughran, 2007, p. 19).

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Higher Education Trends with Focus on the Future of Teaching and Learning

Gloria J. Peppers

Abstract: Higher education during the 21st century will encounter numerous challenges while embracing current trends and innovations in higher institutional learning. The future of higher education will need to become a collaborative, empowering, knowledge-based economy of collective intelligent people from education, the corporation world, and government to meet these challenges. The future of education revolves around the past and the current trends that will lead to a technological, diverse, and ever-changing society in the future, including current governance, political issues, foresight, and the effective leader who will affect systemic changes in the operational functions in an institution of higher education.

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INTRODUCTION

Higher education leaders are facing many challenges, emphasizing current and future trends in institutions of higher learning. These challenges encompass financial resources, technological changes, changing student demographics, lifelong learning, as well as inadequate or insufficient facilities in the new millennium. In order for higher educational institutions to address these problems “head on,” they will require effective leadership to meet these challenges for their future success. Subsequently, the success will involve collaborating with collective intelligent people from the knowledge-based economy of education, corporations, and government to address these challenges in an ever-changing society. Most importantly, the purpose of higher education is to prepare learners for success in life, in the workplace, in communities, as well as in their personal lives.

The focus of this paper is to elaborate and to illustrate higher educational trends for the future, based on several indicators, to lead and to facilitate systemic change processes by learning from the past, which can lead to preparing for the future in institutions of higher learning.

HISTORICAL AND CURRENT TRENDS, GOVERNANCE, AND POLITICAL ISSUES IN HIGHER EDUCATION

The tradition of the United States’ 370-years in higher education has always embraced and been committed to undergraduate education. According to Thelin and Gasman (n. d.) from 1700 to 1900, less than 5 percent of Americans between the ages of eighteen and twenty-two enrolled in college. Later, between World War I and II, this figure increased to approximately 20 percent, rising to 33 percent in 1960 and increasing to more than 50 percent in the 1970s. However, during the final decades of the twentieth century and because of the transformation of America the elite higher education trend is continuing, noted Trow (1970). Access to universal postsecondary education has come to reality as part of the American agenda on higher education.

HISTORICAL TRENDS IN HIGHER EDUCATION

The American university tradition owes much to the English universities of Oxford and Cambridge in the sixteenth and seventeenth centuries in preparing young

adults for leadership and service roles that included building character rather than producing expert scholars. In addition, between 1860 and 1900, acknowledged Thelin and Gasman (n. d.), such historical roles excluded women, African Americans, and Native Americans who eventually gained some access to higher education (p. 8). Consequently, by the mid-nineteenth century, women had become formal participants in advanced studies due to the popularity of the new “scientific” courses of study at some colleges during this time. In fact, one educational innovation was the founding of the “female academies” and “female seminaries.” These institutions offered a range of courses and instructional programs, such as home economics, the social graces, and departments associated with a “finishing school.” Moreover, a few Northern Black Colleges had been established by free Blacks, as well as by White abolitionists, prior to the end of the Civil War, between 1865 and 1910. During this time, additional provisions were made for African American students to pursue higher education with the founding of many small historically Black colleges in the South (p. 9). Further, into the twentieth century, many of these institutions, namely, Booker T. Washington’s Tuskegee Institute, Fisk, Howard, Spelman Morehouse, and others were prohibited by state governments from offering graduate programs, advanced work or first professional degree programs, such as law, disclosed Wright (1988).

The emergence of public junior colleges, state normal schools, teacher colleges, and the creation of new technical institutions came under the umbrella of higher education after World War I and during 1915 to 1945, noted (Diener, 1986; Levine, 1986). The great state universities of the Midwest and West...fulfilled the promise of the Morrill Land-Grant Act of 1862 to serve the statewide public, with enrollment at...large campuses reaching fifteen thousand to twenty five thousand. Many institutions regarded today as large state universities were limited in size and curricular offerings in the first half of the twentieth century. For instance, as late as 1940, there were many large state universities offering minimal advanced programs with less than five thousand students, according to Thelin and Gasman (n. d.).

Higher education’s “Golden Age” was depicted during the time of 1945 to 1970, which introduced the Servicemen’s Readjustment Act, known as the GI Bill, which provided a short-term measure by which the federal government could mitigate the pressure of thousands of returning war veterans seeking jobs in a saturated labor market. The strategy was to make federal scholarships for postsecondary education readily available to veterans, which in retrospect had long-

term consequences, as well as some dysfunctions. For example, the GI Bill was far more attractive to veterans than legislators acknowledged and women veterans of the war service were underrepresented as recipients of the GI Bill scholarships. Another historical trend occurred during the time of prosperity in the 1960s, which actually created problems for higher education, acknowledged Thelin and Gasman (n. d.). The most troubling concern was the quality of undergraduate education, for the most part, was used by all universities to use in undergraduate enrollments, as a convenient mean of subsidizing new graduate programs and research institutions. This era was also known as the “multiversity,” which corresponded, noted Kerr (1964) with the “federal grant university” (p. 46). These institutions consisted of a flagship campus with advanced degree programs with large enrollments of students and budgets geared toward “soft money,” engaging in research and development projects funded by the federal government and private foundations and contributors. The decades from 1970 to 1990 embraced another era of events for higher education, including the declining confidence from the public because state governments and other traditional sources were no longer providing amicable contributions to learning institutions. Actually, this was the era of student unrest, which contributed to negativity toward American higher education. The federal government introduced large-scale entitlements for student financial aid, such as the Pell Grants and the Supplementary Educational Opportunity Grants (BEOG). Additionally, these generous programs made it affordable for students to pursue a college education, which enacted additional loan programs and work-study opportunities combined with increased institutional funding for scholarships to higher education during the period from 1972 to 1980. American higher education demonstrated an increase in innovation and resiliency during this time, even though there was a decline in student enrollment. However, colleges’ recruited new constituents, including older students and more students from...traditionally underserved, such as women and minorities. In addition, college leadership had to change their managerial style in order to make informed decisions that promoted budget accountability, as well as shifting resources to marketing, fundraising, and student recruitment in order to seek and retain new students.

Because of this trend, new government incentive programs provided the vehicle to aid American colleges and universities to implement new programs. Finally, many colleges and universities from 1990 to 2010, encompassing the twentieth to the twenty-first century had increased enrollments and were becoming prosperous in maintaining high enrollments on their campuses.

According to Ehrenberg (2000) there were concerns about the rising costs of college and because of the generation of “new learners,” Cross (1981), a pioneering dean of students and renowned researcher, indicated both parents and institutions were enjoying this prosperity in the 1900s as well. In fact, there was another constituency, “adult learners,” engaged in higher education during this time of increased prosperity. By 2000, the diversity of students in American higher education...influenced the shape and structure of institutions. For instance, during this time, women became a decisive majority of student enrollments at numerous independent and public institutions, particularly in women’s intercollegiate athletics and other student activities, stated Thelin and Gasman (n. d.), especially at historically Black colleges and universities. In other words, adults often categorized as “nontraditional students,” continued to gain in numbers...at all levels of academic degree programs (p. 20). Today, the ultimate challenge for higher education is to be cognizant of governance structures and the political process in leading colleges and universities through the 21st century.

GOVERNANCE AND ISSUES

The structural governance and political institutions involved in the governance of higher education differs from state to state, and these entities have well-defined governing boards that have the power to insulate higher education policies in individual states from political agendas when focusing on postsecondary education, according to Nicholson-Crotty and Meier (2003). Above all, the main responsibility of governing boards is to engage in governing and to shoulder the responsibilities for all institutions under their auspices (p. 84). However, disclosed (Knott & Payne, 2002; Lowry, 2001) as cited in Nicholson-Crotty and Meier (2003) postsecondary education has three types of boards. First, consolidated governing boards are noted for high levels of autonomy, they are the most centralized for coordinating postsecondary education and their responsibilities includes the governance of individual institutions or systems. In addition, consolidated governing boards are responsible for all decisions concerning that single system or individual institutions because they do not have different governing organizations. For this reason, within this structure, the boards have all the rights and responsibilities within the framework of established state laws. In addition, the consolidated governing boards also coordinate functions, including planning, setting public agenda, policy, analysis, and problem resolution (p. 85). Secondly, governing boards participate in developing and implementing policy, as

well as advocating the needs of the institutions within the board’s jurisdiction to the legislature and governors. These boards have numerous responsibilities, according to the (Education Commission of the States, 1977 & McLendon, in press), which involves formulating faculty personnel policies, such as awarding tenure and serving as the last step toward appeal process regarding faculty grievances. These polices will include allocating and reallocating resources between the institutions in their jurisdiction, and establishing policies for setting up tuition or fees. In fact, most of these governing boards are responsible for academic program review and approval, budget development, and maintaining information and accountability. The other type of governance board that is a component of higher education, would be the coordinating boards, which...provide working with state government and the governing boards of the state’s systems, which embrace these learning institutions. Most importantly, these coordinating boards do not possess the power and autonomy necessary not to be influenced by politics. What’s more, coordinating boards are different from consolidated governing boards because they do not govern institutions and they do not appoint institutional chief executives of the boards or set faculty personnel policies. The governor of the state is responsible for appointing the agency executive, in most instances, based on recommendations of the coordinating board. Further, these boards have limited scope and less power, for instance, when making recommendations regarding budgets for higher education. However, the responsibility of some coordinating boards is for approving academic programs, as well as limited coordinating functions, which primarily consists of administering student financial aid or licensure responsibilities, as reported in the Education Commission of the States (1977).

POLITICAL ISSUES

The governance of higher education within individual states evolves around other political institutions, including the governor and lieutenant governor; however, these political figures usually ignore higher educational institutions when making decisions for these systems. Their roles may include exerting influence through formal powers, such as appointing board members or executives (State Education Agencies and Commissioners), and others are dominated by the power and influence of the legislature. In addition, various positions in the legislature also affect higher education policy, such as appointing members of the boards. Thus, experiencing loss or gain depends on the character of the state legislature and its influence on these boards and on the success or failure of higher educational institutions.

According to Zusman (n. d.) the twenty-first century has brought with it profound challenges and changes both within and outside the academy and are altering its character, its students, faculty, governance, curriculum, functions, and every place in society, since the end of World War II.

TRANSFORMATIVE NATURE OF TEACHING, LEARNING, AND TECHNOLOGY

Higher educational content has changed over the last 20 years demonstrating that teachers are broadening their range of instructional methods because the content knowledge being experienced by learners becomes outdated before students graduate, disclosed Vogel and Klassen (2001). Therefore, the transformative nature of teaching and learning needs to change from content-based learning to learning that embraces process-based learning, which is geared toward providing students with creative problem-solving skills. Consequently, the new millennia are surrounded with excessive amounts of information; hence, these students should be taught how to adapt to changing situations because it is important for them to identify the most relevant content, which will serve their needs in future trends. As a matter of fact, this transformation of ideology, cited these authors, may occur when students are sensitive to process, adaptable to change, and aware of the benefits of information technology (p. 104).

INSTRUCTIONAL TECHNOLOGY ON TEACHING AND LEARNING IN HIGHER EDUCATION

Today's technological advances, combined with American consumer providing a generation of students with opportunities to study via distance learning courses, Internet curricular "virtual universities" and off-campus sites are the trends in the future of higher education. Therefore, these innovations have led nontraditional students, notably, adults, to show an interest in a new segment of postsecondary education, the for-profit education sector, particularly, Capella University. However, campus leaders should maintain and be aware of and mark events that offer information and inspiration that can be valuable to future trends on college and university campuses.

In the past, teaching methods that presented a single language, addressed learning styles and motivation

approaches are no longer adequate and appropriate for today's learners. For this reason, teachers who are willing to embrace new technologies will produce learners that are more effective by employing technological strategies and experiences to facilitate learning for students at any level of learning. In other words, rather than making technology available to students, new learning and teaching is characterized by the introduction of flexible and innovative teaching/learning technology into the learning process (p. 105). There is anxiety among many educators introducing new technology suggests a removal of the teacher from the process due to the rise in usage of technology, thus eliminating the role of faculty members. Teachers will never be replaced by technology; however, there is an integration of computer-based interactive multimedia, which may include CD-ROMs and the worldwide web as part of the delivery of content. Obviously, the authors noted that student-directed learning for adults must become a more important component in program design (p. 105).

Teaching with technology facilitates a shift away from lecture-driven toward student directed learning. In these learning environments, students begin to actively construct, transform, and extend their knowledge because they are no longer treated as passive receivers of information. Many studies have demonstrated, noted (Lamb, 1992; Sponder and Hilgenfeld, 1993; Jonassen, Peck, & Wilson, 1999) that when teachers initiate interactive materials, students not only learn more, they learn quickly and find learning more enjoyable, as well as needed life skills of problem-solving, how to think. Put another way, they begin to take responsibility for their own learning. Another way to increase students' comprehension and retention is for the teacher to use effective presentation visuals, especially those that use color and some degree of animation, concluded Morrison and Vogel (1998). Therefore, students deemed that instructors are better prepared, more professional, more concise, more credible, and more interesting. Technology, acknowledged (Alavi, Yao, & Vogel, 1997) can enable teachers to work together, to share materials, and complement each other's expertise in adding value to education.

Technology will continue to change by introducing innovations, capabilities, and availability in the future. For example, students are offered various programs that will enable them to buy laptops and purchase software at affordable prices. Furthermore, software companies are constantly developing, creating, and designing high quality applications in a short time, namely, the tablet with I-pad functions, thus enabling students and faculty to explore a wide range of interface and application issues.

In addition, technology and educational environments are engaging in exploration and implementation of the importance of technology in providing a variety of needs for faculty, as well as for the student. In today's learning environments, there is a heightened awareness and appreciation for the interaction between technology and educational pursuits. Presently, however, higher educational leadership must embrace technology, recognize, and provide a comprehensive educational experience for the future.

LEADERSHIP AND PERSONAL FORESIGHT SKILLS IN HIGHER EDUCATION

In today's ever-changing society, leadership is needed to help drive change and for universities to survive. Education for the 21st century will continue to reflect a new approach of professionalism toward learning and practice, according to Cortese (2003). This author noted all parts of the university system are critical to achieving a transformative change that can progress by connecting head, heart, and hand (pp. 17-18). Educational administrators for the twenty-first century must be able to become effective leaders that are able to cope with uncertainties and continuous adversity in higher education. Moreover, according to Murphy (1984) many educational administrators do not appear to possess the knowledge, skills, and foresight necessary for directing higher education institutions effectively in the 21st century. The author noted that many individuals who began their professional careers in the early years have leadership styles that are inappropriate in today's modern society when dealing with the managerial and administrative problems in the present-day educational environments. If institutions of higher education are to respond to the needs of a technological and diverse society, an effective educational administrator suggested Campbell (1979) must possess a set of qualities and characteristics in a learning environment. In fact, a leader must have (1) above average intelligence (2) mental stability (3) a high energy level (4) the ability to provide an organization with direction (5) sound interpersonal skills (6) a willingness to take risks and (7) political astuteness. Additionally, other qualities must include a good self-image, a wide teaching experience, a commitment to lifelong learning and an awareness of shared vision and values in leading an organization toward success. Further, higher educational administrators, noted Fast (1977) must "be dynamic, flexible, and precise, able to work with people, anticipate and accommodate change and make decisions" (p. 38). Future administrators will

need to possess proactive, anticipatory, and flexible leadership qualities and skills to serve as effective visionary leaders in their institutions, according to Fantini (1981) and to survive. Most importantly, higher educational administrators are not the "cure all" for all problems and concerns in the institution. However, the expectation should be to provide the institution with a leadership style that is appropriate for the time (p. 443). Therefore, educational leaders in the future will have to be proactive, anticipatory, and flexible if they are to provide the institutions they serve with effective leadership qualities and skill to survive.

FACTORS THAT LEAD AND FACILITATE SYSTEMIC PROCESSES

There are many educators desire the role of being an effective leader, stated Owens and Valesky (2011), however, they must have a clear knowledge of the essentials of organizational behavior in deciding how to comprehend and to engage in the practice of leadership (p. 2). One of the pivotal roles of any educational leader is to provide responsible leadership, which has taken on a new urgency in recent years, according to Gorton and Alston (2009). The rise and fall of a nation is contingent on effective leadership in a society, business, or higher education, cited Wang (2010). Consequently, effective leaders must be willing to be "risk takers," leading and facilitating systemic change processes in their field in order to achieve positive results and outcomes for their organization. In higher education, policies are implemented based on the leader's vision. Therefore, leaders of all levels have some common duties and responsibilities to provide structure and directions for stakeholders, regardless of the leadership theory or style demonstrated in the school community. In higher institutions and other educational organizations, noted Northhouse (2007) leaders are responsible for the duties of their organization, to provide structure and leadership for all stakeholders for achieving a common goal for the betterment of their institution. Researchers have studied leadership skills for many years, noted Bass (1990), and have concluded that leaders must possess technological skills, interpersonal skills, and knowledge-based skills from K-12 settings to higher education settings.

Moreover, individual leadership characteristics may influence leadership effectiveness, noted (McCuley, & Douglas, 2004; Kim, 2007), which include intelligence, assertiveness, emotional intelligence, gender, role, as well as emotional stability. Owens and Valesky (2011) definition of theory of practice is an individual's personal comprehension of gathering, organizing, and integrating

facts and experiences that are encountered daily when making appropriate decisions as a professional (p.58). Theory of practice in educational leadership is based on these three concepts. These leadership concepts will employ the continue behavior of adults in a school setting. Secondly, understanding the culture and climate in which one is engaged, seeking various approaches and ways of organizing, collaborating and empowering others to accomplish a task, and leaders must engage with all stakeholders to gain their trust, respect, acceptance and confidence to achieve desired results and outcomes when making decisions for the organization.

Interpersonal skills and emotional intelligence are vital when working with others on a personal level, cited Bolman and Deal (2008) these personal relationships are essential for sustainability in leading any entity or organization in the public domain. In fact, many leaders fail to alleviate barriers to change due to the lack of sincere intentions because they do not possess the expertise and knowledge that comes with challenges of change in different situations. Additionally, consensus building and communication skills are pertinent in the role of an effective leader as well. In fact, Lucas (1994) as cited in (Gorton, & Alston, 2009) stated when seeking consensus, which is a technique or a skill that provide groups with an opportunity to discuss individual views, to elicit support, and to convince others within the group. In other words,, the central aim of consensus building is to trust the groups' ability to choose its position for the good of the organization, as well as empowering all members' views, to listen and to respect all participants in the decision-making process. Additionally, this technique embraces cohesiveness and increases commitment to the decision that has been made and willingly supported by the group.

The leader has the primary responsibility for communication in any organization. In any case, the leader should communicate one-on-one with key subordinates frequently, to establish and maintain effective communication. In today's technological venue, various communication channels are the vehicle most often used by 'senders' and 'receivers.' These communication channels may include **writing**, such as using notes, letters, internet, electronic chalkboards, texting, smartphones; **verbal face-to-face**, especially, individual conferences, small and large group meetings; **electronic communication** namely, internet, e-mail, telephone, I-pad, documentation stations, smartboards and so on. Furthermore, exchanging valuable information on education issues and challenges with other professionals in the field involves embracing interpersonal relationships within and outside the organization. Bolman and Deal (2008) contend interpersonal relationships revolve around individual satisfaction and organizational effectiveness.

CONCLUSION

The most important purpose of higher education is to prepare learners for success in life, in the workplace, in communities, as well as in their personal lives. The future of higher education will be required to meet twentieth-first century challenges "head on" for their institutions to survive in an ever-changing society, while addressing and embracing new instructional and innovative technological trends for the Millennium generation of learners.

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Differential Effects of Three Time-Delayed Procedures on Temper Tantrums in a Child with Mild Developmental Disabilities

Seungyeon Lee
Robert G. Harrington

Abstract: This study compared three time-delayed conditions for teaching a child with mild developmental disabilities to wait until a requested reinforcer is delivered, without engaging in temper tantrums. In the first phase, a functional behavioral assessment (FBA) was conducted to identify the functions of the child's temper tantrums. Then, a stimulus preference assessment determined the appropriate reinforcers to be used in each treatment session. After this phase, delayed gratification was taught by manipulating three conditions: (a) a fixed 5-minute time delay, (b) a progressive 5-minute time delay with verbal cues, and (c) a progressive 5-minute time delay with visual cues. An alternating treatments design across settings was used to compare the three conditions and determine which was the most effective in teaching delayed gratification. The behavioral changes in participants' temper tantrums were measured through direct observations. The results showed that the progressive time delay with visual cues was shown to be the most effective intervention. The findings also showed that temper tantrums caused by impulsivity had a direct relationship to intolerance of delayed gratification.

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Keywords: delayed gratification, functional behavioral assessment (FBA), functional communication training (FCT), stimulus preference assessment, fixed-time delay, progressive-time delay, temper tantrums.

INTRODUCTION

Children's behavior is derived from a subtle interplay between cognitive processing and social learning. This study examined this interplay in a child with developmental delays while teaching the concept of delayed reinforcement to him both in clinic and at home. The research also evaluated the child's ability to regulate his impulsivity during a function-based behavioral assessment (i.e., functional behavior assessment [FBA]) under three conditions that vary the types of delays the child must understand. Introducing the concept of delay access to tangible reinforcement may highlight the importance of emotional regulation, thereby preventing the future occurrence of problem behaviors and aiding children with special needs, parents, therapists, social workers, and its related professionals.

In the context of developmental psychology, delayed reinforcement is the concept of foregoing immediate satisfaction to gain the desired item. If a child chooses to have his or her favorite toy (i.e., the reinforcer) after waiting for ten minutes instead of having it immediately, the child is the reinforcer (Reichle et al., 2010). Researchers in applied behavior analysis (ABA) and special education have recently suggested that evaluations of impulsivity and the ability to delay the reinforcer may help children with developmental delays avoid future occurrence of impulsive behavior (Lee, Lan, Wang, & Chiu, 2008; Reichle et al., 2010). Impulsive behavior occurs when an individual favors immediate reinforcement over delayed reinforcement (Fisher et al., 2000). The research asserts that the ability to delay reinforcement in early life is closely related to one's self-control of emotion, which can be a predictor of socially acceptable behavior in later life (Reichle et al., 2010).

Those studies have indicated a close association between children's abilities to delay access to a reinforcer and their impulse control, but few studies tested specific mechanism of teaching delayed reinforcement as behavioral interventions that teach emotional regulation to children with mild developmental disabilities. Thus, the purpose of this preliminary investigation was, therefore, to assess (a) the feasibility of conducting the future study in children with mild developmental delays and (b) whether learning delayed reinforcement decreases temper tantrum behaviors. It should be noted, however, that the case study was not intended to be a comprehensive assessment of the treatment conditions.

PARTICIPANT

The participant had to meet the following criteria: (a) be aged between 3 and 5 years old, (b) have limited language abilities based on a norm-referenced assessment, and (c) be referred by the primary caregiver and/or a clinic professional for severe temper tantrum behaviors. A 42-month-old boy, Ivan, who was diagnosed with language delay participated in the pilot study. The primary caregiver of the potential participant was asked to complete the consent form for the child to participate in the study.

Table 1 Participant Development Screening Results

Participant Age	Battelle Developmental Inventory (BDI)	Peabody Picture Vocabulary Test, Fourth Edition
42 months	12 months*	25 months

*The BDI was conducted when the child was 2 years old

When the participant was 2 years old, his pediatrician suspected the child had language delay, as he had difficulty following the pediatrician's instruction and did not say a word. Also, he displayed temper tantrum behaviors, which included yelling, pinching, and crying. After careful observation during his well-being checkups, the pediatrician made a referral to the tiny-k Early Intervention center in his hometown for further evaluation. Then, a speech therapist and a social worker from tiny-k made a home visit and reevaluated the boy. First, the speech therapist conducted a hearing screening and the results showed that the boy had normal hearing. She used the Battelle Developmental Inventory, second edition (BDI-2, published in 2004), a norm-referenced standardized assessment designated for children from birth through age 8. The purpose of the BDI-2 is to diagnose and evaluate the early development of the child with tests in five different developmental domains: cognitive, motor, adaptive, personal-social, and communication. Based on the assessment, the participant obtained a total age equivalent score of 12 months and the following domain scores: adaptive, 14 months; personal-social, 9 months; motor, 11 months; communication, 8 months; and cognitive, 10 months. After the completion of his developmental screening, the participant had received in-home communication training until the age of 33 months and had begun attending a private preschool program at a local daycare twice a week.

Prior to the case study, the participant was diagnosed by a licensed psychologist according the criteria set by the PPVT-IV. His PPVT-IV score was the 2-year age equivalent. The participant relied primarily on either pointing or leading as a means of communication (see Table 1). His primary caregiver informed the research team that the participant engaged in temper tantrums when his preferred item or activity was not immediately accessible or a task demand was delivered.

SETTINGS

During the course of the child's participation in the pilot study, all sessions took place in a clinic room (supervised by the social worker) and at the participant's home. The family made weekly three-hour visits to the clinic and the speech therapist, the social worker, and the researcher made weekly three-hour visits to the family's apartment over a three month period. The primary caregiver conducted all treatment procedures with coaching from both the researcher and the social worker.

Clinic. The research team and primary caregiver attended every clinic session to ensure the participant's safety, behavioral observation for data collection, and the researcher's supervision. Also, the researcher set up a camcorder to ensure the presence of all three people in clinic. The clinic has three rooms. All rooms are utilized

Table 2 *Procedural Fidelity Checks*

Phase	Procedural Fidelity Data in Clinic (video)	Procedural Fidelity Data at Home (video)
Baseline	100%	100%
Fixed Time Delay	95%	100%
Progressive Time Delay without Cues	100%	100%
Progressive Time Delay with Cues	100%	100%

for counterbalancing experimental conditions. Each room contains a rectangular table, several child-sized chairs, and storage cabinets that hold children’s toys and books. Two rooms are equipped with one-way observation windows, camcorders, and sound monitoring. The room that is not equipped with one-way observation windows was set up with additional camcorder as a backup. During all sessions, the participant was seated across from the researcher at a table in a clinic room. Directly outside the three rooms, there was a waiting area provided for a short break.

Home. All procedures were conducted in the participant’s bedroom, which contained toys, books, a small desk and chair, and a bed. The researcher, primary caregiver, two data observers, and a cameraperson attended every home session to ensure the participant’s safety, behavioral observation for data collection, and the researcher’s supervision. Also, the researcher asked the cameraperson to set up a camcorder in the participant’s room to ensure the presence of all four people at home and all data collection.

OPERATIONAL DEFINITION OF TEMPER TANTRUM BEHAVIORS

The dependent variables measured in the study were the occurrence of temper tantrum behaviors and the replacement behavior (e.g., sitting on a chair for 5 minute waiting without any temper tantrum behavior). The operational definitions for his temper tantrum behavior were vocal protest (i.e., any verbal statement indicating he would not follow a demand), pinching (e.g., closure of the participant’s thumb and point finger around the experimenter’s skin or cloth), and hitting (e.g., forceful contact of the participant’s hand to the psychologist from 6 inches or more).

RESPONSE MEASUREMENT AND IOA

All sessions were videotaped both in clinic and at home. Prior to the baseline phase, the researcher recorded and collected all the data during the FBA. For both baseline and treatment phases in clinic, the researcher and the social worker recorded data in vivo. After the data collection was made, the two trained observers looked at the videotaped clinic sessions and recorded all

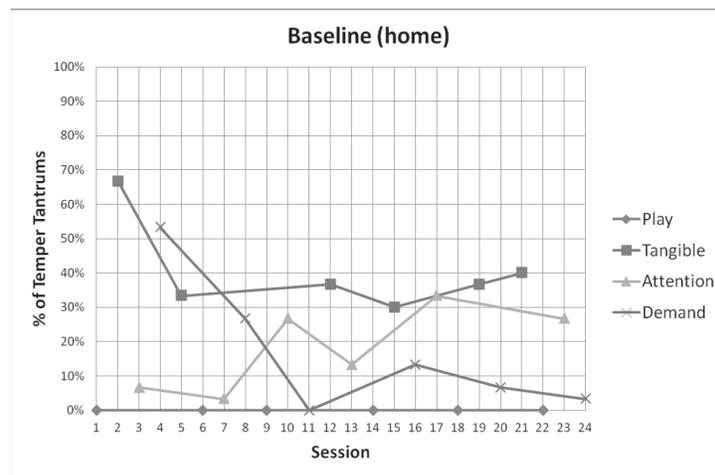


Figure 1
Line Graphs of the Percentages of Problem Behavior Occurrences at Baseline for Each Condition (Clinic).

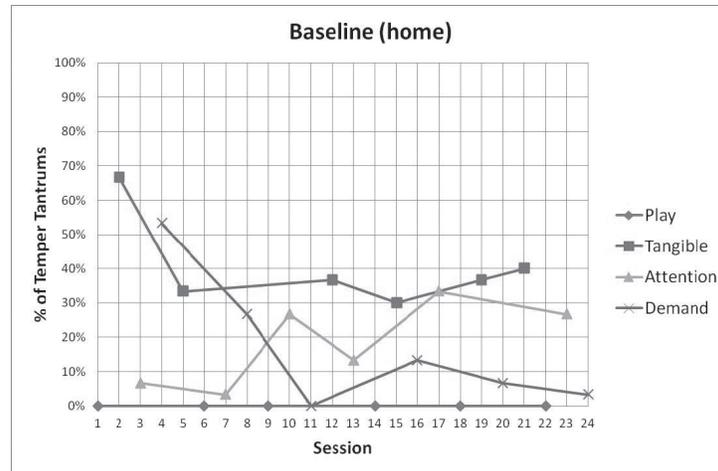


Figure 2
Line Graphs of the Percentages of Problem Behavior Occurrences at Baseline for Each Condition (Home).

data. For both baseline and treatment phases at home, the researcher and the observers recorded data in vivo and from video recording. The observers also assessed procedural fidelity on the videotaped sessions. Table 2 (see the previous page) displays procedural fidelity data for baseline and treatment conditions.

Both the social worker and the researcher served as observers and scored the target responses simultaneously but independently for determining the IOA. The IOA was conducted for 66% of all sessions. Mean IOA for the dependent variables was calculated by dividing each session into consecutive 10-second intervals and comparing the number of responses recorded during each interval by each observer. For both in vivo and videotaped sessions, an exact agreement was reached because both observers recorded the same number of responses in a given 10-second interval. Agreement percentages were calculated by dividing the number of intervals with exact agreement by the total number of intervals in each session. Mean agreement for the dependent variable was 95% (range, 88% to 100%).

EXPERIMENTAL DESIGN

An alternating-treatments design was used to make the three delayed reinforcement intervention comparison feasible. The proposed research method is to alternate among conditions as a means to establish a functional relation between independent variables and dependent variables. In the study, all three delayed reinforcement conditions were simultaneously introduced and

counterbalanced to avoid sequential effect. The design was also used to examine which condition was highly effective using the described strategies.

As well as an alternating-treatments design, a multiple-baseline-across-settings design was implemented to evaluate the effects of the intervention strategies on teaching delayed reinforcement to the participant in two different settings (i.e., both in the clinic and at home). Visual analysis was used to analyze the intervention effect. Experimental control was demonstrated when a change occurred in the level and trend of the measured behavior on the staggered introduction of the intervention. This design is suitable in situations wherein behavior cannot be reversed (Kennedy, 2005). Baseline data was measured on the participant's targeted behavior prior to the introduction of treatment. All procedures began simultaneously. When the proposed intervention effects were observed, all treatment conditions were then introduced. The procedure continued until the conditions were implemented across all phases.

PROCEDURE

The pilot study had five phases: (a) Functional Analysis (FA) as the baseline measure, (b) stimulus preference assessment, (c) parent training on how to implement delayed reinforcement procedures, and (d) delayed reinforcement conditions.

Phase 1: Functional Analysis (FA) as baseline measure. After the FBA, direct observations across settings were conducted to objectively measure the function of the

Table 3 Results of the Stimulus Preference Assessment

Item	Number of selections	Percentage of selections	Rank
iPad	5	83.33%	1
Lego	4	66.67%	2
Train	4	66.67%	2
Cookie	3	50%	4
Blocks	2	33.33%	5
Book	2	33.33%	5
Crayon	1	16.67%	7

participant's problem behavior across settings. The procedure as baseline phase has been established by Iwata et al. (1982/1994). Four conditions (i.e., tangible, demand, attention, and play) were manipulated for the sessions, and the researcher investigated each during a 5-minute session. Each condition was conducted a minimum of four separate times to ensure the stability of the data. A total of 15 sessions were conducted in the clinic (see Figure 1), and 24 sessions were conducted at home (see Figure 2).

The findings showed that the problem behavior was most evoked by the participant's desire for a preferred item, the tangible condition. The selection of replacement behavior was made based on that function.

Phase 2: Stimulus Preference Assessment. In clinic, the paired-stimulus preference assessment (Fisher et al., 1992) was conducted to identify a hierarchy of the preferred items (see Table 3). First, seven different items identified by the primary caregiver were placed on the table. The items were placed within the participant's view but out of reach. Then, the researcher randomly picked two items, placed them close to the participant, and said, "Pick one." The chosen item was handed to the participant, and he was allowed to play with it for 30 seconds. Then the item was removed, and the researcher again randomly picked up two items, excluding the first two items, and asked the participant to do the same. Each item was presented six times in different pairings, and the researcher recorded the number of times each item was picked and converted that to a percentage of selection. The item with the highest selection percentage was used as the reinforcement during the three delayed reinforcement conditions. Based on the results, the participant's most highly preferred item was an iPad.

Phase 3. Parent training for FCT and Delayed Procedures. The participant's primary caregiver reported that the participant had received FCT training from the tiny-k language specialist for a year. The participant understood most of the simple instructions given by

clinical staff members, the primary caregiver, and the researcher.

Based on the screening evaluation, the research team concluded that FCT training was not necessary for the pilot study. However, the replacement behavior was to say, "Please give me [the name of the preferred item]," when the problem behavior evoked.

Prior to implementing the three delayed reinforcement conditions, the researcher trained the primary caregiver on how to teach the participant tolerance for delayed reinforcement. Although this training component is not a part of the actual study, the researcher wanted to ensure that the treatment would be implemented as planned. The primary caregiver, therefore, was provided individualized instructions on the use of delay cues. After the training, the primary caregiver had opportunity to ask questions in regards to the implementation procedures. Then, both the primary caregiver and the researcher had a 30-minute practice session to familiarize themselves with the procedure.

Phase 4: Delayed Reinforcement. The delayed reinforcement phase consisted of manipulating three conditions.

5-minute, fixed time-delay. The primary caregiver placed the participant's most preferred item, the iPad, within view but out of reach. After the participant used a replacement behavior to request the item (i.e., "Dad, please give me the iPad."), the primary caregiver asked the participant to wait 5 minutes. If the participant exhibited temper tantrum behavior during the wait time, he was informed to sit in a chair. The participant was told to wait, but the session was terminated if the participant had a meltdown or showed self-harming behaviors. If the participant appropriately used a replacement behavior within the 5-minute period, the primary caregiver said, "I see. But you still need to wait." Once the participant successfully tolerated the entire 5 minutes of wait time, the researcher gave the release cue and said, "OK, here

is your iPad. You may have one now.” She handed the participant the iPad.

For the first few sessions, the participant displayed problem behaviors and did not want to wait for 5 minutes because the reinforcement was denied. Throughout the sessions, the participant learned how to tolerate the delay at home. However, the participant showed little changes in the levels of compliance when he was in the clinic.

5-minute, progressive time-delay without visual cues. In this condition, the entire 5-minute waiting time was divided into 9 trial periods: 10 seconds, 15 seconds, 20 seconds, 25 seconds, 30 seconds, 35 seconds, 40 seconds, 45 seconds, and a final 80 seconds. The last trial period was the longest to determine if the participant could tolerate more than a minute’s delay if he had been trained to be wait for shorter durations of time.

The primary caregiver placed the participant’s most preferred item within view but out of reach. After the participant used a replacement behavior to request the preferred item, the primary caregiver asked the participant to wait through the first trial period. If successful after 10 seconds, a delay cue was given before an additional 15 seconds passed, the second trial period. If this second delay was successful, a second cue was provided, and the participant was asked to wait an additional 20 seconds. When the participant successfully tolerated 4 minutes and 20 seconds of wait time, the primary caregiver provided him with another verbal cue for the last 80 seconds. Once the participant successfully tolerated the entire 5 minutes of wait time, the researcher gave the release cue and handed the participant the iPad.

During the wait time, if the participant exhibited the problem behavior, he was told to wait. If the participant used his replacement behavior during the wait time, the researcher provided a praise response but reminded the participant to wait. As described in the previous section, occurrences of problem and replacement behaviors were recorded and wait time compliance percentages were computed. The finding showed that the participant’s temper tantrum behaviors were gradually decreased across settings. In the beginning, the participant seemed to be more compliant when sessions were conducted at home. Nevertheless, the percentages for the last four sessions of the intervention in the clinic were decreased than those were at home.

5-minute, progressive time-delay with visual cues. As in the previous two delayed reinforcement conditions, the most preferred item was shown to the participant but placed out of reach. A visual schedule board and nine

stickers were placed in front of the participant. As during the progressive time-delay condition without visual cues, the entire 5-minute waiting time was divided into 9 trial periods. However, instead of giving verbal cues, the primary caregiver asked the participant to put a sticker on the board when each wait period was successfully completed. When the participant used his replacement behavior to request the preferred item, he was asked to wait for the first trial period. If he was successful after 10 seconds, the primary caregiver asked the participant to put one sticker on the board and used a delay cue (e.g., “You need eight more stickers”) before the 7 trial period began. If this second delay was successful, another sticker was given to the participant, a second delay cue was provided (e.g., “7 more stickers”), and the participant waited an additional 20 seconds. If the participant successfully tolerated 4 minutes and 20 seconds of wait time, the primary caregiver delivered a final delay cue (e.g., “Keep waiting, one more sticker”) for the last 80 seconds. Once the participant successfully tolerated the entire 5 minutes of wait time, the primary caregiver gave the release cue and handed the participant the iPad.

During the wait time, if the participant exhibited the problem behavior, extinction was used and the participant was told to wait. If the participant used his replacement behavior during the wait time, the researcher provided a praise response but reminded the participant to wait. As described in the previous section, occurrences of problem and replacement behaviors were recorded and wait time compliance percentages were computed. The participant’s temper tantrum behaviors were significantly decreased to near zero during this intervention, both at home and in the clinic. However, between the clinic and home, the participant showed more compliance on waiting when sessions were conducted at home. Figure 3 shows the changes in the participant’s temper tantrums within the three delayed conditions across settings.

DISCUSSION OF RESULTS AND FUTURE CONCERNS

Figure 3 displays percentage of the participant’s tantrum behavior during all phases of the study. During the baseline (i.e., FA), Ivan engaged in relatively mid-levels of tantrum behavior both in clinic ($M = 42\%$) and at home ($M = 41\%$). His tantrum behavior elevated when the fixed, 5-minute time delay was first introduced at both settings. In clinic, tantrum behavior reemerged even after a few sessions of fixed time delay had been introduced. The behavior was gradually decreased when

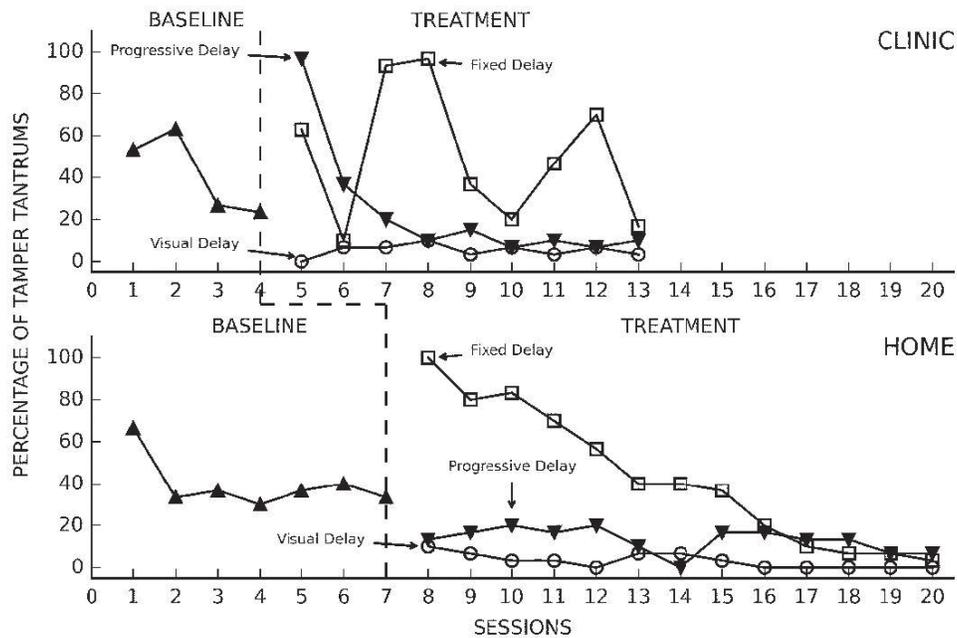


Figure 3 Line Graphs of the Percentages of Problem Behavior Changes during the Three Delayed Reinforcement Conditions across Setting

the fixed time delay was implemented at home. Both the progressive, 5-minute time delay with verbal cues and visual cues were effective in the current study (i.e., near to zero level), but the result of the study indicated that the visual strategy yielded the lowest level of tantrum behavior as the delay to reinforcement was texted to its terminal goal of 5 minute.

The use of FA as baseline measure allowed the researcher to define the function of temper tantrums (Vollmer, Northup, Ringdahl, LeBlanc, & Cauvin, 1995). The current study adds to this specific body of literature and extends it by using the functional analysis results as the basis for evaluating delays to reinforcement. The study demonstrates appropriate experimental control of the three delayed reinforcement conditions. Finally, the study potentially adds to the body of literature related to schedule thinning and delay fading in the context of function-based interventions.

Three limitations of the study were issued. The first limitation was that the study was conducted with only one participant, which makes generalization of the finding difficult. The second limitation was that the functional analysis phase in the clinic setting was on a clear decreasing trend when intervention was implemented. This, coupled with the fact only two settings were used in the multiple baseline component of the design, made the multiple baseline component difficult to evaluate. The alternating treatments component of the

design was more solid because the progressive delay with visual cues consistently produced lower levels of tantrum behavior than the fixed delay, but it would have brought more efficacy if the psychologist had continued the functional analysis phase during the alternating treatments component to provide an extra source of experimental control.

The third limitation was the similarities between the two progressive delay conditions might have produced carry-over effects or multiple-treatment interference. In all conditions, the participant was required to wait for 5 minute to access the iPad. It is possible that repeated exposure to one condition improved performance in the other condition. There was the distinct separation between the two conditions, but nevertheless, this could have affected the participant's tantrum behavior. However, the fixed 5-minute delay condition at home treatment evaluation suggest that interference could have occurred, as intervals with tantrum behavior decreased to levels comparable to the other two conditions toward the end of evaluation.

The results suggest that the progressive time delay with visual cues is an effective procedure for decreasing tantrum behavior. The current investigation supports the importance of delayed access to tangible reinforcement and furthers our understanding by demonstrating that the visual cues during the delay proceeding may produce greater increases in impulse control. Introducing the

concept of delayed access to a reinforcer may highlight the importance of emotional regulation, thereby preventing future occurrences of problem behaviors and aiding children with developmental disabilities.

Still, teaching delayed gratification may escalate some participants' problem behaviors because the reinforcement will not be made immediately available to them. This denied access to the reinforcement may cause temper tantrums and lead some children to engage in

aversive behaviors, especially in regards to the 5-minute fixed time delayed reinforcement condition. Learning how to wait is an important skill for improving impulse-control, but the current finding may reveal that it may take a considerable time for children to understand the concept of delayed reinforcement. More studies will be needed to evaluate the generalizability and maintenance of multiple baseline treatment phase across behaviors or settings.

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Content and Disciplinary Literacies: A Compromise to Benefit Pre-Service Teachers

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Stacey Bumstead
Tara Wilson

Abstract: This commentary addresses the potential gap in teacher preparation programs that has occurred between the adaptation of literacy strategy instruction as proposed by supporters of content area literacy, and instruction in the specific literacies, tools, and processes used by experts in each content area as put forward by disciplinary literacy proponents. Given a mere three hours of coursework related to content area literacy, the authors posit that teacher education programs must equip pre-service teachers with a mixture of both content area and disciplinary literacy approaches.

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Keywords: pre-service teachers, content literacy, disciplinary literacy, content language

INTRODUCTION

At the elementary certification level, pre-service teachers are inundated throughout their coursework with various theories, best practices, basic pedagogy, and content in reading, writing, science, social studies, and math. At the secondary certification level, pre-service teachers have their content well in hand, but might be new to pedagogy and best practices. Regardless of certification level, all teachers want students to develop the necessary knowledge and skills in order to achieve success in learning the content they teach. So, where does teaching the literacies (i.e., reading, writing, listening, speaking, and thinking) associated with each of the content areas fit in? Zygouris-Coe (2015) described essential literacies, habits, of mind, and questioning that is unique to each discipline. Teaching students how historians, mathematicians, and scientists read, think, question, write, and communicate creates a lens through which learning content is authentic and meaningful for students. For example, learning literacies such as how to access information contained in mathematical texts, how to communicate mathematical concepts and ideas effectively both orally and in writing, and how to think mathematically are important components in students becoming fluent in math content.

CONTENT LANGUAGE

Content literacy is the ability to use reading and writing to acquire new knowledge in a specific subject with the purpose of increasing student engagement and development of students who will not only be well-informed of the content knowledge, but who can analyze, evaluate, and think critically about content area subjects (Ming, 2012; Warren, 2013). As proposed by Durham, Ingram, and Contreas-Vanegas (2014), in order to become “fluent” in a content area, teachers must help students learn to read, write, think, and listen in this new “language.” Theorists and researchers have investigated the similarities between content learning and second language acquisition for decades (Gee, 2005; Rincke, 2011; Vygotsky, 1962). For example, Vygotsky (1962) posited,

The influence of scientific concepts on the mental development of the child is analogous to the effect of learning a foreign language [...] It is not surprising that an analogy should exist between the interaction between the native and the foreign language and the interaction of scientific and spontaneous concepts, since both processes belong in the sphere of developing verbal thought (p. 109).

More recently, Gee (2005) described academic social languages, such as scientific language, as a “way of using language so as to enact a particular socially situated identity and to carry out a particular socially situated activity” (p. 20). Durham, et al. (2014) maintain that by becoming fluent, whether in a second language or in a content area, students must be able to interact through listening, speaking, thinking, reading, and writing of that language/content enabling them to communicate with others in society. “In the society of a classroom community, content is simply another language and the teacher a ‘content language’ teacher” (Durham, et al., 2014). The first step in helping develop “content language teachers” is to revisit the foundations of content and disciplinary literacy.

A BRIEF HISTORY OF CONTENT AND DISCIPLINARY LITERACY

Surprisingly, the concept of content area literacy (CAL) is not a novel one. The origins of content literacy evolved from educational psychology and reading education (Hynd-Shanahan, 2013). A seminal study conducted by William Gray (1925) revealed that students learn best when reading strategies are taught in all content areas. Gray is considered the “father of content area literacy”, emphasizing the importance of CAL at all educational levels (Moss, 2005), however the term “content reading” did not become prominent until Herber (1970) published the book, *Teaching Reading in the Content Areas*, wherein he described the differences between literacy development as reading instruction and literacy development as a support for learning content emphasizing that content determines process. That is, students must “learn how to adapt reading and thinking strategies to meet the peculiarities and conceptual demands of each discipline they study” (Vacca, Vacca, & Mraz, 2011, p. 13).

The original notion of content literacy contended that in order to be able to analyze, evaluate, and to think critically in social studies, mathematics, science, art, music or physical education was through literacy (Ming, 2012). Therefore, the purpose of content literacy was comprehension and was taught through the use of comprehension strategies (i.e., KWL charts, semantic mapping, Venn diagrams, sequencing charts, etc.). These research-based cognitive strategies were intended to enhance learning in specific disciplines.

The conception of disciplinary literacy is more recent than CAL. Disciplinary literacy’s foundation involves a mixture of educational psychology, linguistics,

and the disciplines themselves (Hynd-Shanahan, 2013). Rather than focusing on “generic or general reading strategies”, disciplinary literacy is focused on multiple discourse conventions among academic disciplines (Warren, 2013). More specifically, Moje (2008) depicts disciplinary literacy as being “a matter of teaching students how the disciplines are different from one another, how acts of inquiry produce knowledge and multiple representational forms...as well as how those disciplinary differences are socially constructed” (p. 103). In other words, the goal of disciplinary literacy is to guide students to think like experts in that particular field (e.g. mathematicians, biologists, chemists, or historians) and become apprentices of the discipline by linking the advance skills of the experts to the beginning skills of the students. Rather than students utilizing cognitive strategies to determine how reading will occur in content area literacy, the discipline itself will determine the types of strategies that need to be used to comprehend the text (Hynd-Shanahan, 2013). As so often happens in education, this concept has come full circle back to Herber (1970) who contended that content determines process. Because of the differences in theoretical perspectives between proponents of CAL and proponents of disciplinary literacy, a disagreement over which pedagogical framework to pursue has affected training of pre-service teachers.

ISSUES BETWEEN CONTENT AND DISCIPLINARY LITERACY

Brozo et al. (2013) coined the notion of content literacy as being the “outside-in” view and acknowledged that this view could actually hinder some students. High achieving students usually have their own comprehension strategies developed and might find the generic strategies confusing or too cumbersome (Dole, Brown, & Trathan, 1996). Not surprisingly, critics of the old notion of content literacy advocate that rather than viewing content literacy as a cache of generic strategies that are integrated into reading, perhaps educators should take a more contemporary approach and view content literacy as the commitment to consider the essential elements of discipline specific courses (Adams & Pegg, 2012; Draper, 2010; Moje, 2008), specifically recognizing that each individual content area has their own form of literacy.

During the last two decades, researchers have defined the “strategies approach” of teaching content area literacy as promoting continuous common strategies for literate work in different subjects (Allen, 2004; Alvermann, Phelps, & Gillis, 2010; Benjamin, 2011; Collin,

2014; Daniels & Zemelman, 2004; Gregory, 2013; McLaughlin, 2009; Vacca & Vacca, 2005). Often, the “strategies approach” focused on implementing generic strategies (e.g., K-W-L charts, think alouds, FQR charts, anticipatory sets, etc.) to any content area (Warren, 2013). Although these strategies help some students to successfully extract information from the text, several researchers have speculated that content area literacy is simply “teaching generic literacy strategies” and these collections of general skills are not conducive to all of the content areas (Adams & Pegg, 2012; Fang, 2014; Fang & Coatman, 2013). In fact, Warren (2013) cautioned that the “strategies approach” could inadvertently mislead students into a false premise that all texts can be read in the same manner and that the aforementioned strategies do not teach students how to adjust their own approaches to reading in different content areas.

Disciplinary literacy is considered to hold the “inside-out” view that advocates the text itself along with the goals for reading the text will determine the reading processes (Brozo, et al., 2013). As disciplinary literacy has become more defined in recent years, it is evident that limitations do exist. For example, struggling readers and writers do not have the foundational skills and/or strategies that are required to learn the content as an “expert” in the discipline. Moje (2008) cautions the importance of allowing adolescents to be adolescents. Disciplinary literacy requires students to replicate particular identities and not every student has the desire or developmental level to think like a biologist or mathematician (Moje, 2008). Another present issue is that teachers must fully know their domain or discipline including the associated literacies, however many pre-service candidates become teachers without fully understanding the literacies of their own practices (Hynd-Shanahan, 2013). It could take years of experience before these teachers understand their content area literacies and discourses with enough acumen to teach them effectively.

Due to the aforementioned strengths and weaknesses of both content and disciplinary literacy, it becomes clear that pre-service teachers need instruction in practical methods for helping students achieve content literacy. Brozo, et al. (2013) maintain that “[s]trong adherence to a single theoretical perspective is a luxury that real teachers with real students cannot afford” (emphasis added, p. 354).

SUGGESTION OF COMPROMISE

The new demands for literacy including “explicit teaching of sophisticated genres, specialized language conventions, disciplinary norms of precision and accuracy, and higher-level interpretive process” indicate

a growing need for more specific literacy development (Shanahan & Shanahan, 2008; p.43). Due to the Common Core State Standards Initiative and various state standards, current requirements pertaining to language arts instruction mandate that grades K through 12 include informational text genres (Brozo et al. 2013). Students need the ability to make meaning from a variety of text they encounter (Damico & Baildon, 2011). This is evident throughout the Common Core standards. For example, at grade 2, students are asked to “describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text,” and at grade 6 “cite specific textual evidence to support analysis of science and technical texts” (National Governors Association Center for Best Practices & Council of Chief State School Officers, 2010). How can students master these and other similar standards if their teachers are not equipped with the appropriate content literacy knowledge?

Literacy educators need to be knowledgeable in multiple content areas to appropriately teach pre-service teachers literacy skills/tools for each individual discipline. Therefore, teacher educators must release the idea that “every teacher is a reading teacher” (Gray, 1925) and adopt an attitude that views learning in the content areas as also learning the literacies of the content area. Content area literacy instruction includes teaching cognitive strategies such as: questioning, visualizing, thinking aloud, semantic maps, graphic organizers, summarizing, etc. These strategies should continue to be taught specifically as they relate to the subject matter. In this instance, the focus shifts from modifying and adapting the generic strategy instruction that educators currently use to tailoring the strategies to the specific disciplines and emphasizing the tools and processes that experts use to navigate their disciplines. A mixture of both content area literacy and disciplinary literacy approaches would best serve all students.

CONCLUSION

Although, every teacher candidate in the United States is required to take a three-hour credit course in content area literacy, (Lesley, 2014; National Governor’s Association Center for Best Practices [NGA], 2005; Snipes & Horwitz, 2008), the question remains: Is this really enough time to equip pre-service teachers with knowledge to fully understand and implement both aspects of content area literacy and disciplinary literacy? Moje (2008) asks, “... what opportunities do teacher education and in-service professional development provide teachers to learn about the discursive basis of their subject areas? How many

disciplinary teachers have a deep understanding of the knowledge producing practices of their disciplines? How many secondary literacy teacher educators have that knowledge for each of the different disciplinary majors they might meet in a typical secondary literacy course in teacher education programs?” (p. 104). Each content area classroom contains students with a wide range of literacy abilities, and unfortunately, literacy instruction is usually no longer occurring by the time most students engage with complex disciplinary text. Additionally, teachers are sure to face resistance in learning as a scientist, historian, mathematician, etc. from students who have previously only been required to “memorize and reproduce information” (Moje, 2008).

Draper et al. (2012) suggested the best way to help pre-service teachers with these tasks is to help them consider and examine their own role as content area/disciplinary literacy teachers in supporting literacy development. To accomplish this, teacher educators must guide pre-service teachers to carefully examine both print and non-text materials that are crucial to the disciplines. The goal for pre-service teachers is to develop literacy instructional strategies that would make sense in their own respective disciplines. For example, historians may use artifacts such as architect, utensils, and pictures to help gain a clearer perspective of the time period being studied (Draper et al., 2012). These artifacts are not only relevant to the discipline, but they are also considered a form of literacy that provides different perspectives to help make sense of the discipline.

In order to meet the demands of literacy in the 21st century, collaboration between all stakeholders is essential. An ongoing collaboration between university professors, reading teachers, discipline specific teachers, literacy coaches, and reading specialists is necessary to establish that we have a shared responsibility in helping students to succeed in this endeavor and that our ultimate goal is to support students’ disciplinary learning and socialization (Fang, 2014).

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