SRCEA

Southern Regional Council on Educational Administration 2012 Yearbook:

Gateway to Leadership and Learning

Edited by
Franches Kochan, Linda Searby
and Maysaa Barakat

AUBURN UNIVERSITY
COLLEGE OF EDUCATION

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The Southern Regional Council on Educational Administration Yearbook is a refereed journal published under the auspices of the Southern Regional Council on Educational Administration (SRCEA). The title of the 2012 Yearbook, *Gateway to Leadership and Learning,* was the theme of the 2011 Annual Conference in New Orleans, Louisiana. The Council is a non-profit, professional society that exists for the improvement of educational leadership preparation programs through the promotion of research and the exchange of ideas and information. Membership is open to all persons interested in the improvement of preparation programs for educational administrators. An annual meeting is held in the Fall, at varied locations in the South.

Anyone interested in submitting a manuscript for the 2013 *Yearbook* should refer to the information contained on page 14 of this *Yearbook*. If you are willing to be a reviewer for the publication, please see below.

Reviewers Needed!

Reviewers are needed to assist with the selection of manuscripts for the 2013 *SRCEA Yearbook*. If you are interested, please complete and submit the *Reviewer Form* on the website [http://srcea.info/Index2.html] or contact the Editor at myb0002@tigermail.auburn.edu

Anyone interested in applying for membership should go to the website [http://srcea.info/Index2.html] or contact:

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TABLE OF CONTENTS

Southern Regional Council on Educational Administration
2012 Yearbook Editorial Assistance

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Dr. Mitchell also continues to conduct research in new methods of teaching imaging foundations and traditional photography concepts in higher education in a digitally based capture world.

Lori Katherine Mueller completed her Doctor of Education in Educational Leadership through the statewide cooperative program at the University of Missouri–Columbia in 2011. Mueller has worked in a variety of roles at Southeast Missouri State University for more than a decade. Included among these were positions in Human Resources, the Office of the Provost, and the Office of the President, as well as serving as Director of the Instructional Resources and Technology Center for the College of Education. Her current position is Coordinator for Clinical Experiences and Certification for the College of Education. Her research interests include the public good function of higher education, higher education finance, and clinical experiences in higher education, particularly co-teaching as applied to student teaching.

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To SRCEA Members:

Leadership is only second to teaching among school influences on student success, according to the Center for Applied Research and Educational Improvement. Our current issue of the *Southern Regional Council of Educational Administration's Yearbook* highlights just how important leadership is for both student and school success.

With every publication of the *SRCEA Yearbook*, I enjoy paging through and finding those interesting nuggets of gold that seem to speak to me professionally about my practice. Action research shared within these pages offers insight to unique programs that confirm teaching advances, policy reforms, and curriculum advice unique to regional universities and unavailable to many larger research and professional organizations. I view the studies published in the *SRCEA Yearbook* as a micro-lens through which local and regional scholarship is recognized.

While SRCEA is not a performer on a grand stage, it holds a special place for our regional faculty and graduate students. It gives voice to their efforts in scholarship and best practices that might otherwise be missed. I personally value what I have learned from my close relationship with the SRCEA leadership and members. These are relationships I haven't found anywhere else.

I now invite you to settle in to your favorite chair and find those precious nuggets that will give you pause and start you thinking in new ways about your work. A special thanks to all of our contributors and a nod to the great work of tireless co-editors, Fran Kochan, Linda Searby and Maysaa Barakat.

Sincerely,

Paul Watkins
SRCEA President, 2011–2012

Reflections on the SRCEA Yearbook

Frances Kochan, Linda Searby & Maysaa Barakat
Auburn University

This year is a milestone in the publication of the *SRCEA Yearbook* as it is the first year that it is being produced as an online "e" publication. It will be readily available to all on the SRCEA website and we encourage everyone to share it with students, faculty, and other researchers to introduce them to SRCEA and the work it does.

We are very excited about the *2012 SRCEA Yearbook* because we believe that the manuscripts contained within it reflect the SRCEA goal of "providing a forum for the presentation and discussion of research and ideas among individuals with a professional interest in the field of educational administration and leadership at all levels of the education system" and the conference theme, *Gateway to Leadership and Learning.*

The manuscripts herein are in line with this goal and theme because they present research perspectives in K–12 and higher education settings and are focused on leadership and on learning. They deal with subjects related to students, faculty and leaders in a wide range of learning environments in a mosaic of dimensions to create a meaningful whole.

The first two manuscripts delve into issues in the K–12 environment. The first (Cabrera) examines leaders' perceptions of the conflicts that challenge them. The second (Bolen, Davis, and Rhodes) examines school leaders recommendations for implementing common core standards in schools.

The next three manuscripts delve into curricular changes in higher education and provide research into how to make such changes successful. The power of these three studies is that they look at issues with varied student populations, again reflecting the purposes and membership of SRCEA. Mitchell and Hutchinson examine the relationships between the use of PowerPoint presentations and undergraduate students' perceptions and preparation. Long, the recipient of the *Outstanding Junior Faculty Paper Award,* looks at delivery models in cohort-based pre-service programs in teacher education. Tuckwiller and Childress share a follow-up study on cohort groups in a doctoral leadership program. The final article in the *Yearbook* presents a perspective on higher education which impacts all involved, but which is seldom presented—that of legislators, who so often influence higher education policy, practice and finances.

We extend our thanks to all involved in this process. First, we thank all authors, those who were published and those who were not, for submitting their work for review. There were many wonderful submissions and we appreciate their willingness to be a part of the process. The authors whose manuscripts were published worked diligently to edit and revise their work and we appreciate their cooperation and work ethic.

We also extend our gratitude to our reviewers for their many hours of work and their willingness to serve. The reviews were thorough and meaningful to the authors and to us. Thanks are also extended to Altamese Stroud-Hill at Auburn University for preparing the final manuscripts and assuring that the *Yearbook* was formatted properly and in a timely manner. Finally, we send our deep appreciation to the SRCEA Board and to you our readers, for your support and encouragement. We hope the *2012 SRCEA Yearbook* will be invaluable as you seek to improve your programs and the schools you work with and the research you conduct to support these endeavors.

Exploring Challenging Conflicts in Public Schools: Perspectives from the Field

Jill Cabrera, PhD
Western Kentucky University

Abstract

The purpose of this research was to explore educational leaders' perceptions of the most challenging conflicts they encounter in their work. Using a phenomenological approach, the researcher interviewed 10 educational leaders to study their perspectives and experiences with job-related conflict. This paper focuses on participant responses to the research question: "Of the conflict situations you have encountered, describe the one which has been most challenging for you to resolve." Interview data revealed that participants' most challenging conflicts were those involving people and factors beyond the domain of the leader's line of authority and/or work environment. Implications for practice and further research are presented.

Every day, public school administrators face multiple conflict situations within the school community which could be resolved more effectively by utilizing strategies such as conflict management, negotiation, mediation, and coaching skills. Anderson (2007) surveyed school administrators regarding the frequency of conflict they encounter with various constituents. These leaders indicated they most frequently encounter student conflict issues and regularly to routinely face parent conflict issues. They also face conflict issues with teachers on a limited to somewhat regular basis as well as with supervisors on a limited to rare basis (Anderson, 2007).

Although they often encounter conflicts within their work settings, many educational leaders acknowledge their own limitations or lack of expertise in managing or resolving conflict. Foley and Lewis (1999) conducted a nationwide study in which a random sample of 230 secondary school principals rated their own collaborative-based leadership. These principals rated their knowledge and skills related to conflict management, negotiation, and interpersonal problem-solving among the lowest in relation to other skills needed within a collaborative system of leadership.

Many administrators have limited specific training in formal methods for resolving conflicts between and among students, staff and faculty members, parents, fellow administrators, and/or community members who are part of the school environment. As Donaldson (2009) noted, aspiring educational leaders often have limited experience with confronting and successfully mediating conflict involving adults. The importance of and need for more extensive professional development for educational leaders in conflict resolution is evident in educational literature. Ninety-one percent of the campus administrators who responded to Anderson's (2007) survey indicated that conflict management skills were "very important" within their leadership roles. Furthermore, over half of the leaders indicated that their conflict management training at the school district and university level ranged from none to some; only one third of respondents rated their university-based training as considerable to extensive. Based upon the results of his study, Anderson (2007) concluded that universities need to improve their preparation programs for educational leaders in the area of conflict management. In a study by Foley (2001), secondary school principals cited the need for professional development in negotiation, mediation, and conflict resolution. Foley (2001) concluded that a need exists for practical professional development in the area of conflict resolution which might include field-based experiences and/or mentoring.

While a significant amount of school leaders' time is expended on managing and resolving conflict, current educational literature about the nature of conflict in public schools and the emerging types of conflict is limited. In order to develop pertinent conflict resolution training for educational leaders, specific and timely information is needed about the conflicts educational leaders encounter in their work settings. Studying conflict through the leaders' lenses has the potential to provide strong foundations for future professional development and university preparatory programs for educational administrators.

The purpose of this qualitative research was to explore educational leaders' perceptions of their most challenging job-related conflicts. The study contributes to a broader understanding of conflicts educational leaders encounter in public schools by exploring conflict through 10 leaders' perspectives and experiences. Interviews were conducted with district- and school-level leaders serving in public schools in northern Mississippi during the 2009–2010 school year. This paper focuses on participant responses to the following question: "Of the conflict situations you have encountered, describe the one which has been most challenging for you to resolve."

Research and Theory

Conflict is an inevitable and natural aspect of human interaction. "Conflict is a discord of needs, drives, wishes, or demands" (Bodine & Crawford, 1998, p. 35). The nature of conflicts in society is often reflected in the schools; thus, the nature of conflicts occurring in educational settings is constantly evolving as society changes. With the emergence of an increasingly global society and advances in technology, the conflicts in public schools have become increasingly complex (Jentz & Murphy, 2005; Madsen & Mabokela, 2002). Educational leaders' roles in resolving conflict are complicated by the extremely diverse and multifaceted conflict situations within their contextual settings (Grogan & Andrews, 2002; Jentz & Murphy, 2005; Madsen & Mabokela, 2002). Although some school administrators have formal training in conflict resolution, research indicates that many of these leaders need improved professional preparation and development in this area (Anderson, 2007; Foley, 2001; Foley & Lewis, 1999).

Conflict in Organizations

Researchers have studied conflict in various types of organizations, including educational settings. Mhehe (1997) conducted a research review on conflict and conflict management across a broad spectrum of management and organization theory as well as practice from psychology, sociology, business, and educational sectors. Variables correlated with conflict included organizational structure, constituents' participation, organizational control, contention between diversity and stability, and interpersonal interactions (Mhehe, 1997). More recently, Burke (2006) explored four levels of conflict within organizations: individuals with the organization, interpersonal with the organization, organizational units with each other, and inter-organizational.

Theorists have examined underlying causes of conflicts within organizations. Hoggett (2006) purported that public organizations, including schools, are more complex and experience more conflict than private organizations. Public officials in a pluralistic society tend to be charged with the responsibility for resolving conflicts and addressing issues with which the larger society is struggling (Hoggett, 2006).

Dweck and Ehrlinger (2006) focused on the relationship between prejudice and intractable conflicts and explained two theories through which people regard human qualities: entity and incremental. Entity theorists tend to believe human qualities are fixed and, as a result, have a limited ability to recognize change or growth in others. Conversely, incremental theorists believe humans have the capacity to grow and are adaptable. Dweck and Ehrlinger (2006) found that the incremental theory tends to be more conducive than the entity theory in working toward common interests and resolving conflicts.

Mhehe (1997) posited that conflicts arise when views are divergent or incompatible or when goals are compatible but approaches on issues differ. Dealing with conflicts is an inherent aspect of educational leadership due to the daily contact with individuals within the school and community who have divergent needs and views (Mhehe, 1997). A survey of school administrators indicated they most frequently encounter conflict issues with students and parents, yet they also experience conflict issues with teachers and supervisors (Anderson, 2007).

Conflict Resolution in Organizational Settings

Although conflict in organizations is inevitable, processes have been developed for effectively addressing and resolving conflict situations at various levels. Fisher, Ury, and Patton (1991) explained strategies for successfully negotiating conflict situations. A core concept emphasized by these authors is the need to bargain over interests rather than positions. They presented means to create options which would result in mutual gains for the parties involved in conflict and explained how to use standard or objective criteria to help anchor the resolution of problems. Additionally, Fisher et al. (1991) provided alternative techniques for situations when negotiation is not progressing effectively and/or when the mediator is dealing with difficult people. Barsky (2008) recommended using a transformative approach in "highly conflictual situations" when there is no apparent common ground (p. 164). With the transformative approach, the mediator

has a goal of fostering mutual empathy and creating an environment wherein affected parties feel empowered and respected.

Alternative approaches for resolving conflict resolution have been practiced by other researchers. Burke (2006) presented a case study to illustrate a five-phase process for resolving conflict between groups within a business organization. Jentz and Murphy (2005) outlined a five-step Reflective Inquiry and Action (RIA) Model for school leaders to use in processing confusing or complex situations. Research by Dweck and Ehrlinger (2006) showed that overt efforts to train people in incremental theory resulted in increased openness to learning, decreased defensiveness and stereotyping of others, and improved capacity of individuals to constructively participate in resolving conflicts.

Professional Development Needs for School Leaders

The importance of and need for more extensive professional development for educational leaders in conflict resolution is evident in educational literature. School leaders responding to Anderson's (2007) survey clearly indicated that conflict management skills were "very important" within work, and over half of them responded that the conflict management training they received at the school district and university level ranged from none to some. Based upon the results of his study, Anderson (2007) concluded that university preparation programs for educational leaders need improvement in the area of conflict management.

In a nationwide research study, Foley and Lewis (1999) surveyed 230 secondary school principals to gauge their self-perceptions of competence in collaborative-based programming. The respondents' lowest mean self-ratings were descriptors related to principals' conflict management, negotiation, and interpersonal problem-solving skills. Foley and Lewis (1999) emphasized the need for professional development to specifically address those areas. As a follow-up to the previous study, Foley (2001) conducted research to explore the self-perceptions of secondary school principals about their own professional development needs related to implementing collaborative-based leadership methods in providing educational services. A large majority of respondents indicated a need for professional development in negotiation, mediation, and conflict resolution.

School leadership programs need to prepare administrators to manage the evolving problems and challenges of the 21st century society (Grogan & Andrews, 2002). These researchers stressed the need to develop instructional leaders who are able to establish constructive relationships among all school community members and to create collegial environments in which power is shared. Additionally, Grogan and Andrews (2002) affirmed educational leaders' roles in promoting social justice and embracing diversity. Similarly, Madsen and Mabokela (2002) emphasized that public schools have changed "from monocultural, nondiverse contexts to those that contain ethnically diverse, multilingual, and economically disadvantaged children" (p. 2). A goal of supervisory training programs should be to develop individuals' comfort with "the inevitability of conflict in supervision" (Nelson, Barnes, Evans, & Triggiano, 2008, p. 182). The more effective a person perceives his/her skill set to be in coping with a problem, the more likely it is that the person will approach a similar situation than avoid it (Nelson et al., 2008).

Hoggett (2006) promoted the concept of gathering information about conflicts from the individuals involved. He asserted, "It makes more sense to ask the members of a team or organization what are the primary dilemmas that they face" (p. 188). Covey (1989) addressed the concept of creating win-win situations through this simple statement, "Seek first to understand … then to be understood" (p. 255). Seeking information from educational leaders about the conflicts they are encountering is fundamental to understanding their needs for professional development in the area of conflict resolution.

The research findings related to conflict and school leadership revealed several important findings and implications. Primarily, public school administrators are encountering many situations in their work environment that require the ability to effectively resolve and manage conflict. While the research showed that leadership styles and approaches significantly impact collaboration and resolution of conflict, many school leaders do not feel adequately trained in strategies and skills needed to resolve conflicts, pointing to the need for more professional development. In order to provide the type of professional preparation that will be the best fit for their needs, more understanding is necessary regarding the nature of the conflicts that educational leaders face in the present era and in various societal contexts.

Methodology

This study used a phenomenological approach (Bogdan & Biklen, 2007) to discover perceptions of the most

challenging conflicts principals and superintendents encounter as educational leaders. Extensive interviews were conducted to gather rich, thick descriptions and gain an in-depth understanding of highly challenging conflicts encountered by educational leaders in public schools in a specific geographical area. Although the findings are not generalizable to the population as a whole, they should provide information that will expand our understanding of conflicts principals and superintendents face in one geographical area of the country and serve as a foundation for additional study in other locations and/or with other groups.

Participants

Gall, Gall, and Borg (2007) cited the goal of purposeful sampling as selecting cases that will potentially provide rich data and in-depth understandings related to the purpose of the study. This study was designed to capture perceptions of challenging job-related conflict from *key* leaders in public school settings. The research on this topic is limited. Therefore, the researcher sought to provide multiple perspectives within a specific geographical area by selecting a sample which represented varied characteristics (leadership position, years of experience in leadership position, rural vs. urban work setting, educational background, gender, race, etc.). This approach provided a broad range of responses and resulted in potential bases for further studies.

The educational leaders who participated in this study were employed in public schools in northern Mississippi during the time the research was conducted. Ten public school leaders consented to participate in this study: four superintendents, one assistant/associate superintendent, and five principals. As seen in Table 1, participants represented nine school districts, five of which are city/municipal districts and four others which serve whole or partial counties. The principals served at two high schools, one middle school, and two elementary schools.

Participants in the sample represented diversity in the following areas: educational and experiential backgrounds, gender, and race. Leaders who represented diverse student populations were selected as participants with consideration given to the location, size, and demographics of the schools or districts where the educational leaders were employed.

Table 1
Description of Participants

Leadership position held:	Superintendent	n=4
	Assistant Superintendent	n=1
	Principal	n=5
School districts represented:	County/Partial County	n=4
	City/Municipal	n=5
Leader in first year of position:	Superintendent	n=2
	Principal	n=1
Years of teaching experience:	Range of 2–16 years	
Current or previous experience as a principal:		n=9
Earned Ph.D. in educational leadership:		n=2
Currently in a Ph.D. program in educational leadership:		n=4
Gender: Female		n=3
Male		n=7
Race: Caucasian		n=7
African American		n=3

Instruments

The instruments for the comprehensive dissertation study included a set of open-ended research questions and the researcher. Following the review of research and theory, the researcher developed the research questions to address deficiencies and limitations in the existing literature related to conflict and conflict resolution in public educational settings.

Research question. The interview question was written to illicit narrative responses about the central phenomenon of challenging conflicts encountered by

educational leaders in public schools in northern Mississippi. The interview question was addressed to participants in initial one-to-one personal interviews.

The researcher served as a public school leader for 12 years prior to completing a Ph.D. in educational leadership. Most of the researcher's leadership experiences with conflict resolution occurred within the context of school discipline, delivery of special education services, and leadership/management of school personnel.

The researcher recognized the potential for bias due to her background experience in school leadership. Extensive efforts were made to facilitate the study and not to add or detract from participants' responses. The researcher sought to develop a question which would be applicable to participants as well as thought provoking; the interviews yielded extensive data filled with rich, thick descriptions that *more than* answered the interview question. Additionally, the researcher utilized active listening skills which were developed within her leadership roles to foster the interview climate. The researcher concluded that the benefits of her experience and perspectives outweighed the potential for bias.

Data Collection
Upon approval of the dissertation committee and the Institutional Review Board (IRB), the researcher contacted participants in person or by telephone and provided an oral lay summary. Each participant provided oral intent to participate in the study and scheduled a date and time for his/her initial interview. The researcher sent a confirmation e-mail to each interviewee with two documents attached—a list of the research questions and the IRB approved information letter with the written lay summary.

Each participant was interviewed two times for a total of 20 interviews with 10 participants. Initial interviews were conducted in person; six follow-up interviews were conducted in person and four by speaker telephone. At the time of the initial interview, each participant received a written lay summary which outlined IRB protections as well as potential benefits and risks of participation. Each participant signed a copy of consent to participate.

During two semi-structured interviews, each participant was asked open-ended questions to illicit narrative responses. Initial interviews ranged from 40 minutes to one hour and 39 minutes in length. Shorter follow-up interviews ranged from nine to 35 minutes in length.

Data obtained from the interviews were transcribed and coded by themes to describe the nature of conflicts based up leaders' experiences in public educational settings.

In conducting the study, only the researcher interviewed participants, and the same base questions were asked for all initial interviews. This protocol was followed to maintain consistency in research techniques.

Data Analysis
Creswell (2009) reviewed a six-step approach for data analysis and interpretation for qualitative research: preparing and arranging the data, reading the data and reflecting on its meaning, implementing a coding process, developing descriptions and generating categories or themes, reporting findings, and interpreting the data. The researcher transcribed all 20 digitally recorded interviews into text data. A coding process was followed for noting key meanings and topics in the margins of the transcripts and determining consistent terms to represent emerging themes. The second interview with each participant allowed for discussion and/or clarification of emerging themes. Upon completion of all transcripts, text data were reviewed to identify common themes as well as discrepant views related to the central phenomenon. Subsequently, the transcripts were coded by hand by dominant themes, and findings from the interview data were summarized. Finally, the data were interpreted across cases to provide information about the central phenomenon of conflicts encountered by educational leaders in northern Mississippi public schools.

Reliability and validity. While the researcher brought experiences and biases that shaped this research, prescribed measures were taken to intentionally address the quality and credibility of this qualitative research process. Reliability of the data was improved by checking the accuracy of the transcriptions against the digital recordings. Maintaining consistency with questioning and in the coding of findings also ensured greater reliability of results.

Several validity strategies were incorporated to improve the accuracy of findings. First, rich, descriptive data from the interviews was used in conveying results. Second, member checking was incorporated consistently. Each participant was granted an opportunity to review his/her completed transcripts to verify that they accurately represented the experiences and perspectives he/she wanted to convey. Also, the use of shorter follow-up interviews allowed for an opportunity to

discuss the findings and themes from initial interviews with participants and seek clarification or additional information. Another means of increasing validity was to provide discrepant information for findings that did not align with the themes or other participants' perspectives or experiences.

Limitations of the Study

Limitations of this study included factors related to time and access to participants. The study's qualitative nature required an interview format which involved an extensive amount of time in interviewing, transcribing, and interpreting data. For public school administrators, time is a precious commodity; therefore, obtaining access to them for enough time to explore the topic was an issue. The researcher considered scheduling interviews for days when administrators were working and students were not on campus (i.e., student holidays, teacher in-service days). However, all interviews were conducted at mutually convenient times on days when school was in session. Another limitation was the extensive time involved in transcribing interview data. Four of the participants opted for the follow-up interview to be conducted by telephone conference which reduced the time as well as monetary investment for traveling to participants' locations. Due to the pervasiveness of conflicts in public school settings, the benefits of the study overwhelmingly outweighed any limitations.

Data Interpretation

Study participants described details of challenging conflicts between and among various constituents in their school communities. Data revealed interpersonal or intergroup conflicts involving community members as well as societal or political pressures or influences. Participants also reflected upon internal conflicts which they experience in their leadership roles.

Seven primary themes emerged: (a) change (b) community and societal expectations (c) political pressures (d) relationships (e) communication, (f) ethical dilemmas, and (g) objective criteria/standards. These seven themes were portrayed across all cases (Cabrera, 2010). The sections that follow described the findings and themes in more detail.

Change. Several of the leaders shared challenging conflicts related to making changes within schools or districts. One principal who was serving in a district under state conservatorship captured the essence of such conflict when he stated:

There's a conflict, say for example, under conservatorship…. There are a lot of conflicts, but the biggest conflict is conflict with change. There's a conflict with people understanding; a lot of times people don't understand who the conservator is, what he's doing, and understand the difference [from what the norm is for the school district].

A first-year principal assigned to a newly constructed school building explained that employees and parents showed resistance and difficulty adapting to changes. This participant indicated that many changes occurred within the move because grade levels from different campuses were blended together in the new environment. The principal shared that two grade levels were moved into the building the last week of July before school started the following week. Further, two other grade levels moved in several weeks later, resulting in two moves in one year. Overall, the principal acknowledged that creating a new culture required all constituents to adapt to significant changes simultaneously. For example, some employees experienced difficulty adjusting to a different leader, a new working environment, and shifts in routines. Parents voiced opposition to changes in their students' dress code. The leader summed that the moves and changes were a "huge challenge" to manage.

A few participants indicated that changes which affected a large portion of their constituents were especially difficult, such as comprehensive curricular changes or the impetus to improve student performance across a school/district. An assistant/associate superintendent described the most challenging conflict as "a professional development issue." This participant expressed how difficult it is to communicate initiatives to the teachers and garner their support. As an example, this participant voiced concern over the English tenth-grade state assessment results for the school district and indicated there is great resistance from teachers to change instructional practices to improve student performance on the assessment.

Community and societal expectations. While change can bring many challenges to educational leaders, established norms and expectations within the community or society can also create problems. One example of this was the superintendent who addressed the expectation of providing the influenza (H1N1), or "swine flu," inoculations to students. This societal concern was translated into an expectation that the school was a place where most youth could receive the vaccination, and numerous participants were weighing

the benefits of providing the inoculations against the risks.

Another participant faced the persistent challenge of trying to dispel negative perceptions of the public school system among local community members. As this superintendent expressed, "The greatest problem I have now is trying to get the community to actually rally around the schools, to just really say, 'This is ours. We need to do everything we can to make it the absolute best.'"

A principal described how his most challenging conflict was when his non-renewal of an employee stirred extensive controversy in the community both inside and outside the school. This principal summarized that the employee was leading a program in a different direction from what the school and district leadership envisioned. Efforts to redirect the employee and guide him through an improvement plan did not result in the desired changes. The principal received support from the superintendent and the board which ultimately led to the employee's non-renewal. Challenges associated with the conflict went beyond the due process issues. One of those challenges was uniting the community after the employee was non-renewed. Another challenge was conducting a search and hiring the best replacement for the vacant position once the employee was non-renewed. As the principal noted, "It took a special person, and we had to know what we were looking for and what type of person we needed to come in and fix that problem." Through this example, the participant revealed multiple, complicated levels of conflict that educational leaders must resolve within one specific issue.

Political pressures. Another area of difficulty, closely related to community and societal expectations is political pressures. One such challenging conflict seemed to bridge political and societal spheres. When President Obama was scheduled to address school children in a public speech in fall 2009, a number of participants experienced discord among members of the school and larger community whose views were extremely divergent. Many parents and community members expressed strong views regarding whether or not the speech should be aired in participants' schools and classrooms. The dissonance resulted from differing views on both socially and politically-based issues.

Strong evidence of political pressure was noted in one superintendent's account. A state representative publicly submitted a request for this superintendent's resignation in a local newspaper without meeting with the superintendent prior to the publication of the article. The superintendent explained that the representative had not asked for an opportunity to discuss his concerns prior to submitting the article. This superintendent added:

> Now the day that he put it in the paper, he did tell me he wanted to meet with me. I think that's because a lot of community people had heard about it prior to it actually coming out, and I think they…were kind of telling him that wasn't a proper way to handle things.

The participant shared how difficult the conflict was because the two of them were not able to resolve the differences satisfactorily, yet affirmed, "I still am very open to trying to work with him."

Relationships. The theme of relationships was embedded within many of the conflict situations noted previously as well as other situations which participants described. One superintendent explained how his most challenging conflict situations were ones where adults make choices, especially in the personal lives, which have an impact on others.

> I think the most challenging conflict situations probably…are those that don't really deal with work. You manage a lot of adults. Adults do a lot of things, and when you have two adults under your supervision that do things that maybe are not appropriate or they are not perceived as appropriate within the community that often times can cause some real conflict—external conflict and internal conflict (with other co-workers, etc.). Sometimes it can get into legal issues, so that's a real tough one because you don't necessarily want to dictate their personal life, but then again, you have a responsibility to maintain a level of integrity within the system. People are looking to you to do that as the leader…. When it starts impacting work and the environment that you're trying to protect in regard to not only the academic status, but the integrity of the system, you have to step in and say, "It is now my business." That's hard to do, unfortunately. If you provide leadership for a lot of people, that's going to happen.

Relationships also dominated the list for one principal when describing the challenge of working with people who have their own agendas and parents who try to control their child's affairs within the school.

Relationship conflicts were also evident in another principal's account of a teacher/parent who aired criticisms through Facebook. The teacher/parent worked at the participant's school, and the criticisms were aimed at employees at another school within the same district. This example also illustrated aspects of how technology became a tool for the teacher/parent to communicate dissatisfaction.

Communication. The theme of communication was evident throughout the leaders' responses and is evident within many of the themes. Numerous participants' examples illustrated how miscommunication, lack of communication, and inappropriate communication between and among people caused or exacerbated conflict situations. For example, one principal described a conflict that involved a teacher assigned to his campus, who was also the parent of a student attending another school within the school district. The teacher/parent aired critical remarks related to her child's school on Facebook that created conflict not only for the teacher/parent, but also for the participant and members of the other school. This principal expressed concerns about how he felt the actions of the teacher/parent reflected on his school and leadership.

A noteworthy aspect of study participants' responses was the consistency with which they conveyed the importance of their own communication abilities and skills in resolving the challenging conflicts they encountered. This was of particular interest given that the interviews were conducted individually.

Ethical dilemmas. Ethical dilemmas surfaced within many of the participants examples of their most challenging conflicts. For example, the principal who non-renewed the employee (head of a program) confided feelings of internal conflict associated with the decision:

> You know, I always try to do what's right for the kids and the school, but I also try to do what's right for the people who work for me. That individual lost his job, and he lost his livelihood, and I had to consider that, and I tried to help. But at the same time, he was being pulled by somebody else in a different direction, and I just knew where he was headed and how it was going to turn out for him, and I never could get him to just listen to me.

Although this principal was convinced the decision was in students' best interests, the participant expressed the burden of concerns for the non-renewed employee.

One superintendent verbalized the ethical dilemma he faced when trying to decide whether or not his school district should offer the H1N1 ("swine flu") vaccinations:

> It's a double-edged sword because I know there's a parent out there that (because the parent's a single parent, working two jobs) won't be able to go or won't go to the clinic to get the shot. Well, if the child gets H1N1 and dies from it, you know, if we had offered the shot, we could have saved the child. At the same time, if you give the shot and one dies from it, it's on you.

This leader expressed a desire to help prevent illness among the students and larger community, but he struggled with taking on the responsibility for medical processes outside his realm of expertise.

Objective criteria/standards. Some participants acknowledged either directly or indirectly the use of objective criteria/standards for resolving challenging conflicts in their work settings. This challenge seems closely related to others such as relationships, ethical dilemmas and communication, but it seems to stand on its own as a central theme of conflict. For these participants, the objective criteria/standards generally are their district and school policies, procedures, and rules for employees and students. These policies, procedures, and rules provide guidance for both prevention and management of conflict in schools; they serve as the criteria for maintaining orderly school environments as well as quality and continuity of services for students. Yet, at times they may also create internal and external conflict.

The objective criteria/standards extended to the applicable laws in one participant's case. An employee in this principal's school was caught pirating music onto her personal computer during company time. Subsequently, law enforcement officers were contacted and involved in the case at the school. Once the police were investigating, the principal's role changed to one of providing the support needed for their investigation. The principal was afraid that the employee might be arrested and charged, but the circumstances were beyond the participant's jurisdiction at that point. To add to the complications, the principal and other employees were advised not to discuss the incident among themselves until the police investigation was resolved. This restriction prevented communications that may have eased tensions and cleared the air

between employees. After the issue was settled, an opportunity for communication was available, but the participant regretted that the tension could not have been alleviated more quickly.

One aspect of the challenging conflicts described by leaders is that many of the circumstances were atypical. In many of the situations, leaders were faced with challenges for which objective criteria/standards did not apply or did not exist as a basis for resolving the conflicts. As one example, the superintendent who faced the public official's call for her resignation in the local paper did not have specific policies or procedures to help her respond to the conflict. School leaders facing the pressures to inoculate for prevention of H1N1 were challenged to make decisions about a potential health crisis; many of them voiced feelings of inadequacy because they had no set standards to follow in making the decision.

The key themes from the study were iterated and exemplified through the responses of participants. The challenging conflicts participants encountered represented a broad range of issues and, in most cases, were more complex because of the number of constituents involved.

Discussion

Participants' responses exemplified the complexity of conflicts experienced by public school leaders. The data revealed that participants' most challenging conflicts were ones which involved people and factors beyond the domain of the leaders' line of authority and/or work environment. Additionally, many of the challenging conflicts could not be readily resolved by relying upon the objective standards/criteria which provide guidance in more typical circumstances. Conflicts they described involved a vast array of constituents from the students all the way to political figures. These leaders identified a multiplicity of factors contributing to conflicts within their school communities. Interviewees' experiences and perspectives highlighted the pivotal role communication plays—whether helpful or harmful—in conflict situations.

Although this research was conducted with school leaders in different positions—superintendency, assistant/associate superintendency, and principalships—the themes emerging from their interviews were consistent across their positions. The themes and many findings from this current study correlated with the

research and educational literature on the topic of conflict.

Educational leaders involved in the study recognized the stressful conditions of a demanding work setting with increasing accountability standards. The picture portrayed in their perspectives and experiences was a fast-paced professional environment being impacted by manifold expectations from both within and outside of their immediate school communities. These expectations combined with the number of constituents involved with public schooling increase the amount of conflict and result in conflict situations that can be highly complex.

These dedicated leaders conveyed their vision, courage, and dedication to stay the course and make a positive contribution in their students' lives. The outcomes of this study hold significant implications for practice and for further research in and beyond northern Mississippi.

Implications

This exploration of the nature of conflicts encountered by educational leaders in public schools in northern Mississippi yielded findings which relate to previous research. Although not generalizable, the findings have strong implications for practice in northern Mississippi which might be applicable to similar settings. The findings also provide a foundation for continued research.

Implications for Practice

This research project has strong implications for educational leadership preparation. Over half of the educational leaders in this study have obtained a Ph.D. or are currently enrolled in such a program. Participants' years of experience in the field of education ranged from between 10 and 30 years each.

One perspective is that in spite of the extensive experience these leaders have in the field, they all recognized the value of learning more in the area of conflict resolution. These participants all respected the fact that their professional field is constantly changing and that the demands are evolving as society is evolving. The leaders acknowledged that the increasing accountability to educate all students and the extensive demands of a more global society are impacting their work environments. With all of those factors, many of the participants noted increased stress levels and an increase in conflict situations.

Another perspective is that these participants provided a wealth of wisdom and insight on the topic of conflict resolution. Their experiences and knowledge, wherever it was derived, have great value for learning communities. Many educational practitioners work off the base of skills and knowledge they possess; reflective and effective educators often monitor and adjust what they do to increase effectiveness.

During the initial interviews, a number of the participants stated how valuable it would be for them to discuss case samples and conduct role plays to learn more about resolving conflicts. Several of them emphasized how they would like more training in conflict resolution, not only for themselves, but also for the students and employees in their school environments. As with so many aspects of effective school management, the changes begin with the leader.

In considering implications for practice, the leaders spoke about the type of professional development that would be valuable for them. Most of them expressed that training which included case studies, role plays, and mentoring would be especially helpful. One leader voiced the need to be involved with a group studying the topic over time; this leader perceived that learning processes for conflict resolution would be incremental and include practical application with recurrent feedback. Numerous participants noted that they would like to learn alongside a group of other practicing or experienced superintendents and/or principals.

Professional preparation and development needs voiced by participants in the current study correspond to those iterated in the educational literature. Foley and Lewis (1999) and Foley (2001) confirmed the need for practical professional development in conflict resolution and recommended field-based experiences and/or mentoring. In a study conducted by the University Council for Educational Administrators, participants identified beneficial aspects of their preparation programs: problem solving, decision making, and real-life experiences (Grogan & Andrews, 2002). Both educational literature and the current research lend evidence to the benefits of interactive, on-going, and experience-based approaches to learning conflict resolution techniques.

The implications for practice apply to university preparatory programs and the Mississippi Department of Education (MDE), as well as other state departments of education. Both the university educational leadership programs and state departments of education share the goal of preparing effective professionals to lead Mississippi's schools. These organizations ultimately have the common interest of educating the students in our nation's public schools. Therefore, these organizations could develop coursework and leadership training in conflict resolution which could include both theoretically-based mediation and negotiation strategies (similar to those provided to legal experts) and opportunities for practical applications such as case studies and role plays.

Implications for Further Research

The results of this study provide supportive evidence of sound research and theory on the topic of conflict, particularly in public education in the United States. Although this study was concentrated in a specific geographical area, the findings confirm numerous concepts from previous research.

However, the study also extends the research base in a number of ways. First, the study is qualitative and provides in-depth, unique viewpoints with descriptions from participants, so the findings provide extensive detail and explanations not available in previous studies. Second, this study provides multiple perspectives from public school leaders about conflicts they are encountering in their work in 2009–10. The most experienced superintendent participating in this study commented that the nature of conflict has changed dramatically in a short period of time.

Further qualitative studies could be conducted to explore the same research question with other participants. One suggested follow-up study would be to use the same question with a broader group of participants throughout Mississippi. Another suggestion would be to conduct a follow-up study using the same question, but narrowing the participant sample to specific leadership positions (i.e., only principals, only superintendents). This second approach could be conducted with leaders from a confined geographical area or with leaders representing different areas or states.

Conclusion

Participants in this qualitative study provided in-depth descriptions of the most challenging conflicts they encounter within their work as educational leaders in K-12 public school settings. From their responses, seven primary themes emerged: (a) change, (b) community and societal expectations, (c) political pressures, (d) relationships, (e) communication, (f) ethical dilemmas, and (g) objective criteria/standards. The participants'

most challenging conflicts involved individuals or issues that extended beyond the realm of their work environment and/or authority. Many of the challenging conflicts these leaders faced could not be readily resolved by applying the objective standards/criteria which might typically be used to resolve conflict situations. Findings of the study illustrate the highly complex nature of conflicts faced by educational leaders in the present day. The current research also demonstrates how even highly experienced educational leaders encounter conflicts which test their leadership expertise and insight and highlight the need to assess and address leaders' needs for professional development in conflict resolution.

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SRCEA Yearbook

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The *SRCEA Yearbook* is the official yearbook of the Southern Regional Council on Educational Administration. The *Yearbook* is nationally refereed and the journal is published in the fall of each year.

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Using a Theory-Based Model for Professional Development: Implementing a National Common Core Curriculum

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Abstract

Nationally, states are searching for the most effective model for integrating the National Common Core Curriculum (NCCC) at the local level. This article describes the training methods and learning model used to address this challenge in two low performing school districts in West Virginia. Pre and post data are presented which validate the effectiveness of the model in improving teacher content knowledge and teaching. Lessons learned and recommendations for school/district administrators charged with implementing the NCCC are also provided.

Introduction

The movement toward the National Common Core Curriculum (NCCC) poses many challenges for school administrators, the most significant of which may be those associated with providing effective professional development opportunities for in-service teachers, particularly in rural school districts/schools so common in the Appalachian region. This article describes a model for providing such professional development in the Reading/Language Arts (R/LA) area including articulating the underlying theory of change, describing intervention strategies, and presenting participant performance data validating the effectiveness of the model.

Literature Review

This review of literature examines the emergence and purpose of the NCCC and assesses the importance of professional development in the implementation of the NCCC. The adoption of the NCCC will not only have an effect on student achievement, but also dramatically change the professional development of in-service teachers.

Emergence of the National Common Core Curriculum

Historically, all 50 states had their own content standards and objectives leading to the notion of "50 states, 50 standards" (Quay, 2010, p.2). This has led to numerous individual state standards so comprehensive in nature that teachers cannot possibly cover them at an appropriate depth (Quay, 2010). The inherent inconsistency in the standards across the states and the resulting variation in levels of rigor contribute to poor student performance.

There is a significant achievement gap between American students and students from other developed countries, with American students ranked 35th out of 40 in math and 29th out of 40 in science (Cleaver, 2011). Nationally, only 24% of students who took the ACT in 2010 scored within the range considered *college ready*. The inconsistencies in standards and rigor are believed to have been major contributing factors in the less than desirable performance of the United States when compared to many other nations on international tests (Quay, 2010). The goal of the National Common Core Curriculum Standards (NCCCS) is to improve student achievement by addressing these inconsistencies (Cleaver, 2011).

In response to such performance indicators, the Council for Chief State School Officers and the National Governors Association began the move away from individual state standards for reading and math toward a set of core standards that would be common to all the states (Cleaver, 2011). The NCCCS, "anchored in college- and career-ready expectations, will ensure that students graduate from high school ready to enter and succeed in entry-level, credit-bearing college courses without the need for remediation" (King, 2011, p. 2). The NCCCS are intended to prepare students for college and career readiness, with the Common Core initiative defining college and career readiness as the ability to "succeed in entry-level, credit bearing academic college courses, and in workforce-training programs" (Griffith, 2011, pp. 5). NCCC will

provide a framework for developing teaching tools and assessments that align with college preparedness.

The NCCC provides flexibility for each state to meet the needs of their unique student populations by allowing the states to decide the manner in which to teach the standards. All states will be working from the NCCC. Consequently, states will have the ability to share ideas, and students from each state will receive the same level of education and be taught to the same standards, thus "creating a system of education that is cohesive and coherent" (Phillips & Wong, 2010, p. 37).

The NCCCS are designed to be *fewer, clearer, and higher* (Phillips & Wong, 2010). The new standards are more advanced in the area of content and require students to demonstrate higher level thinking skills (Griffith, 2011). The standards focus on the specific content needed to help students be college-ready and provide a uniform curriculum from state to state, yet retain some flexibility within the curriculum. For example, instead of offering a specific reading list, the NCCC provides numerous sample texts from which states, school districts, and teachers can choose, thus allowing teachers to prepare lessons and give parents and students an idea of what types of materials they will be working with during the school year (NGA Center for Best Practices and the Council of Chief State School Officers, 2010).

The standards have fewer repetitive ideas and are more cohesive, threading content together, thus helping students apply what they learn between contexts and in a global society, therefore, leading to standards based teaching that allows teachers to be flexible and creative (Phillips & Wong, 2010). Brenda J. Overturf, International Reading Association (IRA) board member, believes that "the NCCC will provide an understanding across states regarding what students should know and be able to do at each level to be ready for the next" (Reading Today, 2010, pp. 17), and that she "loves the fact that student discussion is so prominent in the standards and that the use of technology is naturally embedded" (Reading Today, 2010, pp. 17).

States adopting the NCCC will be involved in change. Current assessments will no longer be applicable. Instead of simply changing current assessments, the NCCC will provide states with the opportunity to totally "redesign their assessment systems, using the standards and college-ready goals as guides" (Phillips & Wong, 2010, p. 39). Phillips and Wong also suggest that these new assessments must be high quality and, instead

of being used to measure student achievement and teacher effectiveness as current assessments do, new assessments should help teachers improve instruction by providing them with examples of formative assessments and tools they need to prepare students to be college-ready (Phillips & Wong, 2010).

NCCC as Professional Development

A framework for professional development is provided by the NCCC. The framework is designed to help educators design advanced assessments and adapt, modify, or replace existing learning experiences with ones that are more conceptually advanced and complex (Common Core State Standards and Gifted Education, 2008). Effective professional development must train teachers to implement the NCCCS by applying differentiated instruction and acceleration strategies, encouraging critical and creative thinking, and developing problem solving skills through inquiry. Content specific professional development is best and should offer instruction on creating and implementing product based pre and post assessments (Common Core State Standards and Gifted Education, 2008, pp. 31).

Carrkeker, Joshi, and Boulware-Gooden (2010) discovered that teachers with 120 hours of professional development were able to correctly identify more phonemes and morphemes, and demonstrated the ability to identify appropriate instructional activities to a greater extent than those teachers with 0, 30, or 60 hours of professional development. They discovered that while 30 and 60 hours of professional development increased the number of correct responses, 120 hours of professional development increased teacher knowledge by the greatest percent. "What attracts teachers to professional development, therefore, is their belief that it will expand their knowledge and skills, contribute to their growth, and enhance their effectiveness with students" (Guskey, 2002, p. 382). Lutrick and Szabo (2010) found that effective professional development is 1) on-going, 2) interactive, 3) collaborative between teachers, 4) driven by data, and 5) driven by teacher interests.

The NCCCS were developed in order to create a common curriculum that prepares students for college and career readiness. The need for an updated version of professional development that addresses standards based teaching has been amplified with the emergence and adoption of the NCCC. Preliminary data suggest that professional development aids teachers in expanding their knowledge and teaching skills,

therefore, allowing them to work toward closing the achievement gap that exists between students in the United States and those in other developed countries. Ultimately, we should see an increase in student achievement.

The Professional Development Model

In spring 2011, Marshall University's Graduate School of Education and Professional Development (GSEPD) was awarded funding for two United States Office of Education Improving Teacher Quality Grants. The grants were collaborative initiatives with the Boone County and Clay County school districts and were focused on providing targeted professional development in teaching comprehension and vocabulary development for middle and secondary teachers.

The overall goal of each project was to improve the strategies of classroom teachers in delivering effective NCCCS based instruction to diverse learners, thus improving achievement of middle and secondary students in two rural school systems in central West Virginia. The specific objective was to increase the achievement in Reading/Language Arts with a focus on vocabulary development and comprehension skills for middle and secondary students in the two school systems.

The need for this project was well documented with student performance data from each school system. In 2009, the reading proficiency rate was 39.76% for high school students in the Clay County School System while the state-wide reading proficiency level was 41.94%. Clay County High School ranked 375 of 669 schools in proficiency for Reading/Language Arts and the district ranked 53rd of 55 counties in the percentage of classes not taught by highly qualified teachers (15.30% compared to the state average of 8.40%) in that same year (Huxley, 2009).

The needs in Boone County were similar. For the school year 2009-2010, the Boone County School System was ranked 41st of 55 counties in West Virginia for reading proficiency (54.12%). For 6th grade students, the reading proficiency was 43.69%, with females scoring at a 45.10% rate and males scoring at 37.44% rate. For 8th grade students, the overall reading proficiency level was 33.64% with females scoring at a rate of 43.13%, and males scoring at a rate of 24.22%.

The theory of change used to guide this intervention was based on the theory-based approach to program development and evaluation as articulated by Rossi,

Freeman, and Lipsey (2004). This model is a causal model in which pertinent resources (inputs) are used to support carefully selected interventions. The assumption is that the process will result in the achievement of proximal (short-term) outcomes which, when achieved, will result in accomplishment of the distal (long-term) outcome(s).

The project used selected inputs, including public school faculty, higher education faculty, Improving Teacher Quality (ITQ) grant resources, and the NCCC to create intervention strategies. These interventions included content focused standards-based professional development combined with formal follow-up sessions, peer review/feedback, and access to instructional materials. This combination of interventions was designed to facilitate the achievement of the short term (proximal) outcomes of enhanced teacher knowledge in Reading/Language Arts, enhanced teacher skills in standards-based teaching, and increased use of standards-based classroom instruction. Achievement of these short-term outcomes should then result in achievement of the long-term (distal) outcome, increased student achievement in Reading/Language Arts. This professional development model is graphically depicted in Figure 1.

The Summer Institutes were weeklong professional development sessions that lasted from 8:00am to 3:00pm daily. The daily schedule involved participants rotating between different stations. The focus of the professional development was to increase participants' knowledge and teaching ability in the Reading/Language Arts content areas by allowing them to work collaboratively with one another and the presenters as they learned hands on strategies for teaching R/LA. Teachers were able to take the materials they received during the professional development back to their schools in order to support implementation of the teaching strategies they learned in their own classrooms.

Evaluation Design

The evaluation design used in the project consisted of distributing and collecting three separate instruments. At the beginning of the Summer Institute, participants were asked to complete the ITQ Program Survey (ITQPS). This six item instrument used a self-report and checklist format to solicit information about participant characteristics, including gender, years of experience, grade level taught, number of students taught, school name and location, and the socioeconomic level of the students at their school.
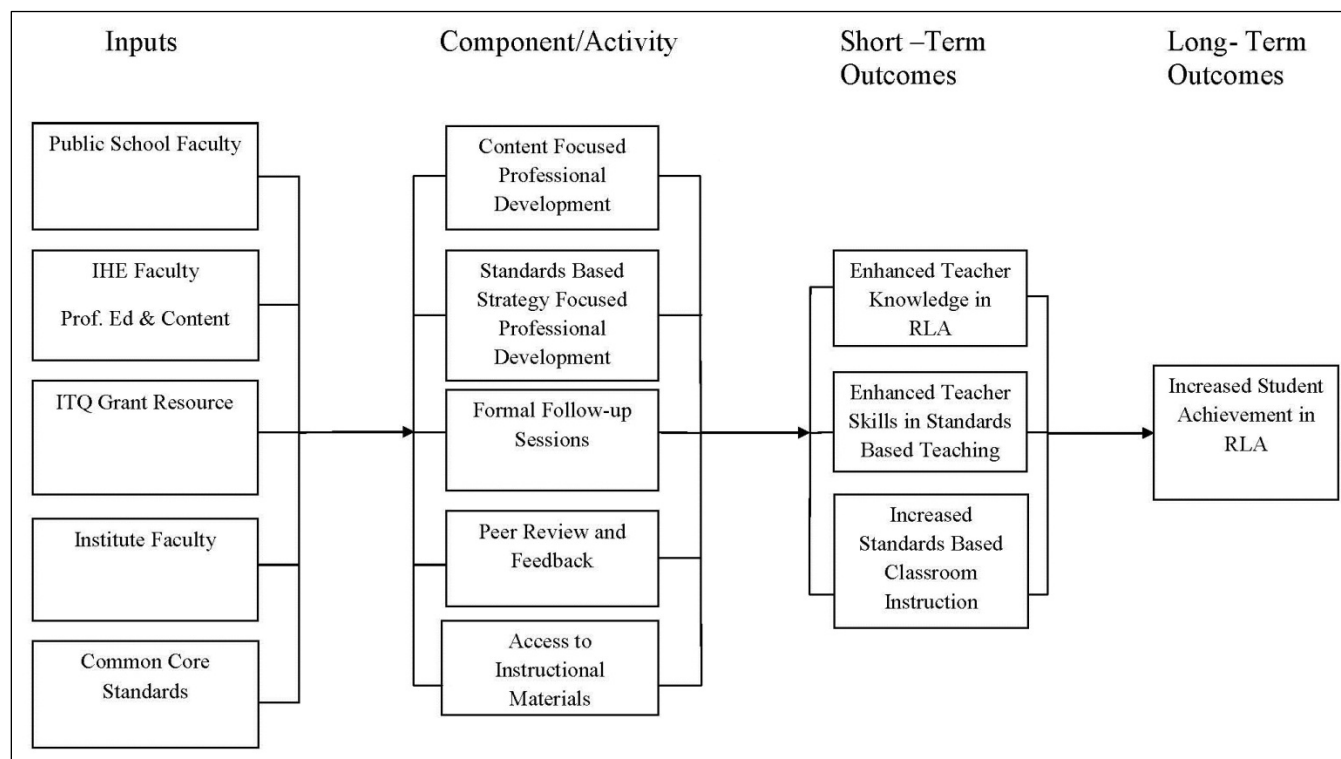
Figure 1. Theory of Change: Professional Model for Implementing Common Core Standards

The second instrument, the Participant Self-Assessment Survey (PSAS), highlighted 20 reading strategies and solicited participant perceptions of their content knowledge and teaching ability before and after the professional development. The PSAS was administered as a pretest at the beginning of the Summer Institute, and again as a posttest at the completion of the institute. The PSAS consisted of two separate sections in which teachers rated their a) content knowledge regarding specific standards in R/LA, and b) their ability to teach these standards. Teachers were also asked two open ended questions which asked them to describe the impact of the workshop on their overall knowledge and skill levels.

The third instrument, the eight item Summer Institute Assessment Questionnaire (SIAQ), solicited participant perceptions about various operational aspects of the Summer Institute. In addition, the SIAQ provided an opportunity for participants to provide a preliminary assessment of how much their content knowledge and teaching ability had increased as a result of participating in the professional development and, how applicable the increased content knowledge and teaching ability would be in their classroom.

Participant Characteristics
The institutes were open to middle and secondary level general classroom and special education teachers in the two participating school districts. Priority was given to teachers of grades 6–9 and any remaining slots were allocated to teachers of grades 5, 10, and 11.

There were 26 participants in the Boone County Institute. Of the 26 participants, 24 were female. Seven participants taught at the elementary level and 19 taught at the middle school level. Ninety-two percent (92%) of the respondents classified the schools in which they taught as high poverty (poverty levels above 50% and below 75%).

There were 24 participants in the Clay County Institute. Twenty-three participants were female. Fifteen of the respondents taught at the middle school level and nine taught at the high school level. More than half (55%) of the respondents classified their schools as very high poverty (poverty levels above 75%), and 33% classified their schools as high poverty (poverty levels above 50% and below 75%).

Findings
Overall Reaction to Model

Participant reactions to the professional development institutes were positive as indicated by their responses to the items on the SIAQ. The overall mean score for participant satisfaction with the various elements of the professional development sessions (Part I of the survey), including instructional leaders, content, material, and facilities, was 4.9 out of 5.0 for the Clay County Institute and 4.0 out of 5.0 for the Boone County Institute. Clay County participants rated the preparation/organization of the instructional leaders as 5.0 out of 5.0, the effectiveness of the instructional leaders' communication as 4.9 out of 5.0, the instructional leaders' effectiveness at motivation as 4.9 out of 5.0, the pacing of the instructional leaders as 4.8, and the class management as 5.0 out of 5.0. The quality of the content was rated 4.9 out of 5.0, 4.9 out of 5.0 for usefulness, and 4.9 for grade level appropriateness. Clay County participants rated the material quality as 4.9 out of 5.0, the material adaptability as 4.9 out of 5.0, and the material diversity/variety as 4.9 out of 5.0. Facilities were rated 4.8 out of 5.0 (refer to Table 1).

Boone County participants rated the preparation/ organization of the instructional leaders as 4.8 out of 5.0, the effectiveness of the instructional leaders'

communication as 4.8 out of 5.0, the instructional leaders' effectiveness at motivation as 4.8 out of 5.0, the pacing of the instructional leaders as 4.5, and the class management as 4.8 out of 5.0. Institute content was rated 4.7 out of 5.0 for the quality, 4.8 out of 5.0 for usefulness, and 4.7 for grade level appropriateness. Boone County participants also rated the material quality as 4.8 out of 5.0, material adaptability as 4.8 out of 5.0, and material diversity/variety as 4.8 out of 5.0. Facilities were rated 3.7 out of 5.0 by the participants (refer to Table 1).

Further evidence of the positive impact of the institute can be found in participant responses provided to two additional SIAQ survey questions. The mean score for the question on how well the workshop increased their knowledge related to the topics presented was 3.73 out of 4.0 for Boone County participants and 3.96 out of 4.0 for the Clay County teachers. The mean score for the second question which asked participants to rate how well the workshop increased their skills related to the topics presented was 3.76 out of 4.0 for Boone County and 3.91 out of 4.0 for Clay County. This indicates that the workshop increased both knowledge and skills for the teachers who participated. These data are provided in Table 2.

Table 1

Participant Evaluation of Boone and Clay County Summer ITQ Institute: Summer 2011 (n = 40)

	Boone County		Clay County	
Survey Question Part I	M	SD	M	SD
General Impression of Institute	4.61	.49	4.95	.21
Instructional Leaders				
Preparation/Organization	4.88	.32	5.00	.00[a]
Effectiveness/Communication	4.80	.40	4.96	.21
Effectiveness/Motivation	4.80	.40	4.91	.29
Pacing	4.53	.50	4.87	.46
Diversity of Teaching Strategies	4.57	.50	4.83	.58
Class Management	4.84	.36	5.00	.00[a]
Content				
Quality	4.73	.45	4.96	.21
Usefulness	4.88	.32	4.91	.29
Grade Level Appropriate	4.73	.53	4.96	.21
Material				
Quality	4.88	.32	4.91	.29
Adaptability	4.88	.32	4.96	.21
Diversity/Variety	4.84	.36	4.91	.29
Facilities	3.76	.48	4.83	.39

Scale: 1/poor, 2/fair, 3/average, 4/good, 5/excellent

Table 2

Participant Responses to Knowledge and Skill Questions from Boone and Clay County Summer Institutes: Summer 2011

Part II	Boone County		Clay County	
	M	SD	M	SD
Did the workshop increase your knowledge relative to the topic(s) presented?	3.73	.53	3.96	.21
Did the workshop increase your skills relative to the topic(s) presented?	3.76	.51	3.91	.29

Scale: 1 = not at all, 2 = somewhat, 3 = moderately, 4 = very well

Perceptions of Knowledge and Use

Twenty reading comprehension and vocabulary strategies were used as a basis to evaluate teacher knowledge and ability to teach Reading/Language Arts before and after participating on the summer institutes. The self-reported data were analyzed using a paired samples t-test.

Pre and post test data for Boone County indicated that there was a statistically significant increase in teachers' perception of their knowledge in reading comprehension and vocabulary development between pre and post assessment in 16 out of 20 reading strategies assessed

(refer to Table 3). Pre and post test data for Clay County teachers indicated that there was a statistically significant increase in teachers' perception of their knowledge in reading comprehension and vocabulary development in 11 out of 20 reading strategies assessed (refer to Table 4). Although Boone county participants demonstrated an increase in 16 of the 20 reading strategies assessed, compared to 11 out of 20 for Clay County, the initial perception of knowledge and skills reported on the pretest by Clay County participants were higher than those reported on the Boone County pretest.

Table 3

Comparisons of Boone County Summer Institute Participant Pretest and Posttest Responses for Current Knowledge and Ability (Summer 2011)

Reading Component Strategy	Pretest Current Knowledge		Posttest Current Knowledge			Pretest Ability		Posttest Ability		
	M	SD	M	SD	p	M	SD	M	SD	p
1. Recognizing sight word vocabulary	3.79	1.02	4.33	.86	.056	3.55	1.09	4.35	.67	.009*
2. Recognizing reading/content vocabulary	4.00	.83	4.58	.58	.004*	3.90	.78	4.60	.59	.007*
3. Using meaning clues to comprehend text	4.00	.83	4.54	.77	.020*	3.63	.83	4.52	.61	.001*
4. Determining author's purpose	4.12	1.03	4.37	.71	.341	4.00	1.02	4.40	.68	.176
5. Using graphic organizers	4.41	.65	4.91	.28	.003*	4.20	.83	4.85	.36	.004*
6. Identifying the main idea/supporting details	4.04	.80	4.62	.49	.007*	4.00	.85	4.50	.60	.066*
7. Using literary techniques to interpret literature	3.75	.79	4.50	.65	.002*	3.47	.90	4.36	.68	.002*
8. Using a variety of literary passages to interpret literature	3.70	.75	4.37	.64	.002*	3.40	.75	4.35	.67	.001*
9. Determining a purpose for reading	3.95	.90	4.66	.63	.005*	3.85	.98	4.70	.57	.005*
10. Selecting poetry that uses inversion/rhyme/rhythm	3.29	.99	3.83	.86	.039*	3.15	.87	3.90	.78	.007*
11. Making inferences	3.91	.82	4.41	.71	.056	3.57	.83	4.47	.69	.004*
12. Analyzing text	3.83	.76	4.54	.58	.005*	3.42	.83	4.36	.76	.001*
13. Identifying the elements of literature	4.08	.88	4.62	.57	.025*	3.68	.67	4.73	.56	.000*
14. Identifying figurative language	3.95	1.02	4.52	.59	.056	3.85	.93	4.45	.60	.030*
15. Making text connections	3.79	.77	4.45	.65	.003*	3.42	.96	4.42	.692	.001*
16. Using connotation/denotation for understanding	3.62	.82	4.11	.81	.045*	3.10	.64	4.25	.78	.000*
17. Using a variety of strategies to comprehend text	3.83	.56	4.79	.50	.000*	3.35	.74	4.75	.55	.000*
18. Identifying word parts (root words, prefixes, suffixes)	3.75	.94	4.58	.50	.003*	3.70	.92	4.45	.68	.007*
19. Using context clues to establish word meaning	4.04	.85	4.54	.58	.043*	3.73	.93	4.47	.61	.007*
20. Forming predictions/opinions	4.20	.65	4.70	.46	.015*	4.05	.75	4.60	.58	.024*

*p< .05   n=26   Knowledge Scale:1/poor, 2/fair, 3/average, 4/good, 5/excellent   Ability Scale: 1/poor, 2/fair, 3/average, 4/good, 5/excellent

Table 4

Comparisons of Clay County Summer Institute Participant Pretest and Posttest Responses for Current Knowledge and Ability
(Summer 2011)

Reading Component Strategy	Pretest Current Knowledge		Posttest Current Knowledge			Pretest Current Ability		Posttest Current Ability		
	M	SD	M	SD	p	M	SD	M	SD	p
1. Recognizing sight word vocabulary	4.09	.87	4.64	.58	.036*	3.64	.95	4.5	.80	.013*
2. Recognizing reading/content vocabulary	4.00	.80	4.70	.64	.006	3.77	.87	4.68	.65	.003*
3. Using meaning clues to comprehend text	4.09	1.0	4.57	.73	.053	3.96	.93	4.57	.66	.019*
4. Determining author's purpose	3.91	.95	4.52	.73	.016*	3.50	1.2	4.45	.86	.010*
5. Using graphic organizers	3.67	1.1	4.54	.66	.001*	3.48	1.2	4.65	.57	.000*
6. Identifying the main idea/supporting details	4.08	.78	4.58	.72	.020*	3.61	1.1	4.57	.59	.001*
7. Using literary techniques to interpret literature	3.70	1.2	4.22	.74	.090	3.23	1.5	4.27	.70	.008*
8. Using a variety of literary passages to interpret literature	3.73	1.1	4.32	.72	.067	3.20	1.3	4.10	.72	.020*
9. Determining a purpose for reading	4.35	.89	4.74	.62	.119	3.95	1.0	4.68	.57	.010*
10. Selecting poetry that uses inversion/rhyme/rhythm	3.43	1.2	4.04	.77	.027*	2.95	1.3	3.91	1.0	.008*
11. Making inferences	3.79	1.1	4.42	.78	.032*	3.43	1.2	4.30	.70	.007*
12. Analyzing text	3.88	.90	4.63	.58	.002*	3.48	1.2	4.39	.58	.002*
13. Identifying the elements of literature	3.74	1.3	4.26	.81	.103	3.23	1.5	4.09	.97	.029*
14. Identifying figurative language	3.91	1.1	4.52	.73	.031*	3.55	1.2	4.32	.84	.026*
15. Making text connections	4.04	1.1	4.63	.65	.055	3.65	1.3	4.48	.73	.018*
16. Using connotation/denotation for understanding	3.61	1.2	4.26	.81	.029*	3.36	1.1	4.09	.81	.020*
17. Using a variety of strategies to comprehend text	3.96	1.0	4.75	.53	.003*	3.61	1.3	4.65	.71	.002*
18. Identifying word parts (root words, prefixes, suffixes)	4.21	.72	4.5	.72	.200	4.00	.85	4.48	.67	.053
19. Using context clues to establish word meaning	4.08	.88	4.67	.57	.016*	3.87	1.0	4.57	.66	.017*
20. Forming predictions/opinions	4.42	.72	4.63	.58	.347	3.91	1.0	4.48	.59	.034*

*p< .05   n=26   Knowledge Scale:1/poor, 2/fair, 3/average, 4/good, 5/excellent   Ability Scale: 1/poor, 2/fair, 3/average, 4/good, 5/excellent

Implications

Quality, needs-based professional development can make a difference in teachers' knowledge and skills. The adoption of the National Common Core Curriculum is a reality in West Virginia as well as other states, and administrators and teachers must be prepared to implement new instructional strategies aligned with the standards in order to ensure all students receive the maximum benefit.

Based on the data collected from this professional development initiative, implications for administrators include providing quality, content focused, and needs based programs that are delivered in a manner that is suitable to adult learners. The professional development model that was a basis for this study can be used as a guide for administrators to begin implementing standards based instruction. Administrators should use multiple data points to evaluate the effectiveness of the professional development, as well as provide teachers with follow up sessions. Continuing onsite support should also be made available to teachers. In addition, professional development sessions should be offered to ensure all teachers in the district receive similar training and materials in order for all students to receive equal educational opportunities. Supplemental materials should also be provided and made available as indicated in the professional development model (Figure 1). A summary of these implications is provided in Figure 2.

Appropriate/Quality Professional Development provides the following elements:
- Content focused
- Needs based
- Delivery suitable to adult learners
- Follow up sessions
- Onsite support (e.g. qualified instructors are available, technical support, consultation)
- Offered to all teachers in district
- Supplemental materials must be provided

Figure 2. Implementing the NCCC for Professional Development

Conclusion

Teachers' perceptions of their knowledge and ability to teach reading comprehension and vocabulary development increased significantly after participating in the targeted professional development. These data, combined with the responses to the open ended questions, provide evidence that professional development can make a difference in developing teachers' knowledge and skills related to vocabulary development and comprehension. A focus on providing quality professional development is essential to successfully implement the NCCC Reading/Language Arts standards in the classroom.

The professional development model used in this study was effective in helping reach the short term outcomes of increased teacher knowledge and teaching skills in Reading/Language Arts. A formal follow up study is planned to determine if the professional development based on the Theory of Change was successful in reaching the additional short term goal of increased use of standards based instruction in the classroom. Teacher responses from the open-ended questions found on the SIAQ survey were a positive indicator regarding the implementation of the instructional strategies and use of materials provided. Many respondents were excited about implementing the strategies they learned. This positive reaction indicates that it is likely the follow up study will find that the long term goal of increased student achievement in Reading/Language Arts has been met through implementation of NCCCS and the increased use of standards based instruction in the classroom.

Teachers need to be prepared to use more differentiated instruction, problem solving, and cooperative learning strategies, and an inquiry based model of instruction, thus altering their current instructional styles in order to align instructional methods with the National Common Core Curriculum. The professional development model used in this project was a positive step toward helping meet the challenges involved with implementing standards based instruction in small rural school districts.

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The Relationship of PowerPoint Usage in Higher Education and Student Completion of Assigned Preparatory Reading

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Abstract

This mixed methods research examined the influence of PowerPoint presentations as a means of delivering core classroom content in higher education courses and their impact on assigned student reading completion. Participants included students enrolled in photography classes, and data was gathered using student online surveys, two student focus group sessions, student interview sessions, and document analysis. Results indicated that reflective use of PowerPoint could positively impact assigned reading and other characteristics of active learning in the classroom. The findings underscore the importance of student preparation for classroom activities and specific instructor modes of content delivery in higher education. Moreover, this research highlights the dependence of student motivation on reflective instruction, as well as generational differences in how information is sifted by students when presented digitally. Implications for practice and recommendations for further research are presented.

The influence of visual technology in teaching has evolved rapidly in the twenty-first century as software developers continue to supply educators and other professionals with an array of computer applications to facilitate classroom learning. Without question, the emergent dominating visual instructional software package in education is Microsoft's PowerPoint (PPT) (Adams, 2006; Cyphert, 2004; Kinchin, Chadha, & Kokotailo, 2008). Although popular with many students and instructors alike, a great debate has raged over the potential negative consequences of uninformed use of PPT and other instructional computer technology to deliver course content. The primary concern of this discussion is the degree to which uninformed use of PPT relates to the amount and quality of effort students' put into preparing for classes through assigned reading and self-learning (Adams, 2006, 2007; Brown, 2007; Clark, 2008; Craig & Americ, 2006; Debevec et al. 2006; Farkas, 2009; Hlynka & Mason,1998; James et al., 2006; Kinchin et al., 2008; Klemm, 2007; Maxwell, 2007; Shwom and Keller, 2003; Stoner, 2007; Susskind 2005; Tuft, 2003; Vallance & Towndrow, 2007.

Current literature suggests the ubiquitous and injudicious use of PPT-type presentations, to deliver core informational content in higher education classes, may have a deleterious effect on student self-learning (Driessnack, 2005; Kinchin et al., 2008; Maxwell, 2007). Student responses in research studies on classroom and test preparation indicate a heavy reliance on downloadable notes from electronic delivery to the exclusion of out-of-class assigned reading (Driessnack, 2005; Kinchin et al., 2008). The significance of this issue is exacerbated by a continual shift of student focus away from class preparation and self-learning (Clump & Doll, 2007; Lord, 2008; Sappington, Kinsey, & Munsayac, 2002), fostering an environment where students forgo independent research and rely on professors as the sole filtering authority for course content (Adams, 2006; Song, Hannafin, & Hill, 2007). As the development of lifelong learning and primary research are principles embedded in the college experience, it would seem counterproductive to blindly continue a practice which circumvents educational goals of scholarship, student responsibility, lifelong learning and encouragement of free thought.

Even with a widespread use of this delivery software and a history of inquiry into this phenomenon, current research fails to fully address the possible connection between unreflective electronic PPT lecture delivery in higher education and reduced student preparation for class through assigned reading. The subsequent pre-scription for classroom activity in these circumstances of PPT content delivery comes at the expense of discussion, dialogue, and other activities conducive to active learning (Adams, 2006; James et al., 2006; Kinchin, 2008; Suskind 2008).

Purpose of the Inquiry

The purpose of this study was to examine the relationship between the pervading use of PowerPoint (PPT) by instructors to deliver course informational content in class and completion rates of assigned student reading aimed at class preparation. Specifically, the research design was to ascertain student perception and behavior in preparation for tests when class core content was readily available from classroom PPT notes, handouts, and downloads. This study was performed in a program area in which professors utilized weekly reading quizzes to ascertain student reading compliance in addition to, or as a replacement for, exams. Since the impetus of reading assigned material in college classes is inherently a student decision, it was believed paramount to examine reading completion rates as reported by students, as well as faculty perceptions accumulated over instructional history.

Research Questions

This inquiry addressed two questions:

1. How do students use PPT lecture, notes and downloads when preparing for quizzes and tests?
2. How does the use of PPT presentations, which provide course content, relate to the completion of assigned student readings and other traditional class preparation methods?

Limitations and Assumptions

The inquiry was characterized by the following limitations and assumptions.

1. The study occurred in one geographical location involving students in one program area of a mid-sized university in a Midwest state.
2. The study was limited to a graphic-based photography discipline with students who, in general, regard themselves as visual learners and may not be characteristic of all student perceptions on reading and electronic instruction.
3. The study was limited to primarily qualitative data which makes it reliant upon the skills and experience of the researcher and the openness and response of participants
4. Researchers as instructors often have preconceived beliefs on student reading completion and firsthand experience with students who vocally express disdain for reading (Lord, 2008). These inherent biases are balanced by a

deep concern for student success and desire to understand this phenomenon highlighted by a growing awareness of it pervasive nature in higher education.

Review of the Literature

Students often find little incentive to spend valuable personal time reading information which will be outlined by the professor later in class lectures (Klemm, 2007). This type of instruction, common in higher education (Kinchin et al., 2008), may inadvertently lead to pedagogy which encourages students to believe knowledge is accrued quickly and without serious mental effort. Furthermore, it encourages students to believe authorities should define reality by deciding what information is necessary to understand and which viewpoints are correct.

Considerable empirical quantitative research and literature is available on the use of electronic course information delivery in education and student satisfaction, test scores, attendance, note taking, and other classroom dynamics (Amare, 2006; Debevec et al., 2006; Driessnack, 2005; Gier & Kreiner, 2009; Maxwell, 2007; Susskind, 2005, 2008; Stark-Wroblewski et al., 2006). Yet, many scholars have questioned the reliance of the PPT lecture method to deliver the majority of course content instruction method accruing less than optimal results in classroom learning experiences (Amare, 2006; Craig & Americ, 2006; James, Burke & Hutchins, 2006; Levasseur & Sawyer, 2006; Stonner, 2007).

When instructors consistently present core course content in outline form, students assume it to be the only relevant information assessed in exams (Adams, 2006; Song et al., 2007). Professors, knowingly or not, are suggesting relevant knowledge reality is, therefore, constructed by them and contained within the PPT lecture. Students are reassured of the professors' knowledge authority in this epistemological environment of learning because the software has "power" to captivate and visually direct attentions as it effectively "points" to the information contained therein (Adams, 2006). Students then are often inadvertently encouraged to focus only on the key points of the presentation in preparation for a quiz or exam to the exclusion of a thorough reading of assigned materials which could provide important reference and background material necessary for active learning. PowerPoint exacerbates this phenomenon because of its widespread use and powerful stimulation in a visually dominant world.

Numerous research studies conducted to understand student perceptions and preferences verify this premise (Adams, 2006, 2007; Amare, 2006; Apperson et al., 2006; Blokzijl & Naeff, 2004; Clark, 2008; Debevec et al., 2006; Driessnack, 2005; Kinchin et al., 2008; Maxwell, 2007; Susskind, 2008). Students often opt for the "visual eye candy" of electronic presentations which have become the normally established content delivery method (Amare, p. 306). Oddly, the current freefall into the use of technology for dissemination of information to which students are so accustomed, and dependent, and which initially appears to quickly generate knowledge, may at times circumvent traditional methods of teaching and learning which universities hold as cherished values.

Change, especially educational change, has historically required a transformational or paradigm shift in the interpretation of reality, especially for leaders (McCombs & Whisler, 1997). If instructors simply continue to follow the current pattern of information delivery using PPT without significant dialogue or research, it appears unintended results will follow. Educators' leadership responsibility in understanding and promoting student learning, therefore, necessitates more critical reflection. This process requires attention not only to what material is taught, but also the pedagogy which actually promotes the learning process, as reality in a classroom setting is often constructed by the modes and methods of the instructor.

Adams (2007) cautioned new instructional computer technology pedagogy has a: "…formative, mediating influence on how knowledge is being represented, presented, and subsequently held by students" (p. 321). In the research and accompanying literature on the potential pitfalls of the ubiquitous use of PPT software and other electronic delivery in education, few people are discussing how these technologies should be used (Maxwell, 2007). Further, student views and interaction on this issue are lacking because the bulk of the research has been from quantitative methods with a central focus on student numerical data such as attendance and grades. Adams cautioned educators of the perceived blindness they referred to by Turkle (2004b) as "the phenomenology of the digital experience" (p. 102). Finally, Adams expressed concern over the lack of research and rich dialogue of the "lived experiences of teachers and students engaged in technology enriched environments" (p. 232) which could inform best practices for seasoned and novice teachers in the application of software and also help in the future design of instructional presentation applications.

Methodology

This research was conducted at a mid-sized Midwestern state university within a school of technology. Since this inquiry was structured to understand the holistic relationship of instructional delivery to student reading response akin to Merriam's (1998) research description of "how all parts work together to form a whole" (p. 6), a mixed-method predominantly qualitative research design was used. Purposeful sampling, described in detail in the sections that follow, was used in selecting the participants. This method of selecting participants is used "to discover, understand, and gain insight" originating in "a sample from which the most can be learned" (Merriam, 1998, p. 61).

Data Collection Methods

In an attempt to overcome limitations, the emergent research design used a triangulation of multiple methods of data collection (Creswell, 2003; Merriam,1998) which included: (a) Likert-type surveys administered to the student sample population of one area of a technology school in higher education; (b) focus groups comprised of volunteers from the surveyed student sample designed to generate student dialogue and discussion on PPT use, student reading, and weekly reading assessment; (c) interviews of selected students on emergent issues from the focus group sessions; and (d) document analysis. To address issues of validity and reliability of the data, peer review and member checking were employed (Creswell, 1994; Merriam, 1998). Member checks were utilized to verify interview and focus group comment interpretation accuracy.

Survey data from closed-ended questions were incorporated at the onset of the inquiry at the beginning of the semester to assess relationships of PPT use by faculty and student reading behavior, as well as overall numeric significance within the population sample. This hybrid approach is in theoretical harmony, as noted by Creswell (2003), as "the situation today is less qualitative versus quantitative and more how research lies somewhere on a continuum between the two" (p. 4). It also agrees with research recommendations of Bullock and Ory (2000) from their studies on electronic instructional evaluation methods and procedures, advocating an elastic hybrid mixed methods approach using a variety of information-gathering techniques to determine the "why" as well as the "what" of evaluation.

Survey Protocol

The student participant pool of 157 students included the total population the photography department. This included all students taking courses in the program major, not just those with declared majors. The survey population encompassed all levels of undergraduate students. The freshman class had the highest representation, as first year students often change majors. The majority of students were female, corresponding with the overall student population. All students were invited to participate in the student survey through Blackboard e-mail. 84 students responded ($N = 84$). An ad hoc section was constructed by Blackboard administrators to facilitate all e-mail and document storage for the student surveys, focus groups, and interviews. The survey was clearly marked as being voluntary with the identities of those who responded through Survey Monkey remaining anonymous. The student survey was comprised of ten questions developed to ascertain student perceptions of PPT use in their classrooms, assigned student reading and percentage of completion, and success of student reading assessment to encourage student reading. Five value answers in descending order were available as well, as was an option not to answer. Eighty-four students chose to participate in the survey.

Focus Group Protocol

Of the 84 students surveyed, 14 volunteered to participate in focus groups. Two additional students volunteered at a later time to be included in the focus group sessions for a total of 16 focus group participants ($N = 16$). Two student focus group sessions, one composed of nine students and another of seven students, were conducted. The focus group participants were divided to include a cross section of academic rank years and a broad mix of ethnicity and gender. The student profiles of all students in the area were available to the researcher through the university network to aid in obtaining appropriate diversity of the group. Student focus group questions were developed with open-ended questions that allowed dialogue and discussion enabling the researcher to gain insight into the study's fundamental questions. Each focus group was audio recorded with two digital recorders and later transcribed by the researcher. Member checking (Merriam, 2002) was used to ensure that the researcher accurately captured the remarks of participant from all groups.

Interview Protocol

Three students were selected purposefully from the focus groups for additional interviews: (a) a graduate student from the program area selected because of the number of years spent in the program, beginning as a freshman who had experienced teaching styles of all faculty members in the study; (b) an international student from China chosen for the interview because of comments in the focus group session and other dialogue contrasting Chinese and other foreign exchange student's views of class preparation and scholarship to American college student behavior; and (c) a freshman who was not able participate in the focus groups due to schedule conflicts but volunteered to contribute in the interview session and was the only first year freshman volunteering for a focus group and a graduate assistant with an undergraduate degree in the program area ($N = 3$).

Individual interviews were conducted on emerging issues from the focus group sessions. The scope of these questions was to ascertain student perceptions as to why faculty utilize assigned reading, PPT lectures, weekly assessments, etc. This measure in the inquiry was to contrast and balance earlier student self-reporting in surveys and focus group questions utilized to determine actual student behavior and motivation in assigned reading completion and class preparation. This emerging design facilitated a more accurate, detailed and appropriate balance of research design to understand holistically the research problem and purpose. Each interview was audio recorded and later transcribed by the researcher. Member checking (Merriam, 2002) was used to ensure that the researcher accurately captured the core of the stories from all groups.

Document Analysis Protocol

Instructor PPTs and lectures used for instruction in the surveyed department were analyzed to determine pedagogical style of instruction and amount of core content used later for testing was included in class PPTs. Those instructors utilizing weekly reading assessment made those documents and texts available for review. Document analysis was used to more fully understand student comments from survey questions, focus group discussions, and interview dialogue for emerging themes and relevant relationships.

Data Analysis

Collection and analysis of data is an ongoing process conducted simultaneously throughout the study in qualitative research (Merriam, 1998; 2002). In this research design closed-end questions from surveys were used to provide comparative information to past research findings of student reading completion and PowerPoint use. Opened-end data were collected in

focus groups and interviews from transcribed notes for reflection and analysis. The data collected provided a rich narrative of student beliefs and practices in assigned reading, note taking, PowerPoint presentation, and weekly assessments. Additionally, faculty assessment and PowerPoint documents were analyzed to ascertain any relationships to focus group and interview comments. All of the data collection methods were used to triangulate research data providing a detailed, thorough and consistent approach. All data were collected solely by the researcher for consistency, utilizing member checks for accuracy (Merriam, 1998).

Transcription and Coding

All student names were replaced with fictitious student names to maintain anonymity. Coding, the process of assigning shorthand designation to aspects of data for retrieval and review, was employed initially to identify information about the data collected (Merriam, 1998). Additionally, coding and themes were used to identify specific constructs and relationships of data. Related data were linked into large groups which Creswell (2003) called chunks. Initially, preexisting coding was used utilized to identify information relating to research question categories of assigned student reading, PPT use, PPT downloadable notes, weekly assessment quizzes, and active learning. Similarities and relationships between these coded themes were delineated hierarchically into categories and finally into emerging themes. The use of individual and small group interviews provided continued review and discussion of content areas most pertinent to research questions. A final descriptive classification of the emergent themes provided opportunity for the researcher to determine the common issues analyzed from all data sources, both faculty and student perceptions, particularly through the concept change theory.

Coding of data was used in designing research tools and methods. Initially, codes centered on research questions of (a) student assigned reading completion, (b) PPT use and effectiveness, (c) PPT downloadable notes used for assessment preparation, (d) weekly reading assessment quizzes to encourage reading, and (e) elements of active learning in classrooms were established as a framework for discussion through analysis of the literature review. Underpinning this framework was a conscious regard to the key factors of concept change theory which include (a) explicit communication of teacher's learning activities and student to-be learned expectations; (b) cognitive connections to other concepts and disciplines; (c) affective influences through use of metaphors, analogies, shared experiences and personal beliefs; and

(d) motivation of those in the learning process (Song et al., 2007). From these a priori theme codes, a narrative thread emerged from student perceptions through in vivo codes.

Summary of Findings

The main question guiding this study was, given the current ubiquitous and unreflective use of PPT for classroom instructional delivery found in the literature, what influence does visual electronic delivery have upon assigned student reading completion. The broad influence and complications of electronic delivery and reluctance of students to read assigned material lead to the two main research questions.

How does the Use of PPT Presentations, which Provide Course Content, Affect Student Assigned Readings and Other Traditional Class Preparation Methods?

Eighty-one (97.6%) students in the survey reported considerable use of PPT to cover major instruction points and 76 (89.2%) respondents indicated a majority of the information is either downloadable to students through Blackboard or available online. These numbers support the contention of authors in the literature review that college students are savvy and understand PPTs contain key information for assessment (Kinchin et al., 2008). Focus group and interview responses mimicked these statistics.

The analysis of documents, in particular PPT notes on Blackboard and instructor websites of at least three of the instructors, as well as faculty survey responses, confirm the contention PPT lecture notes containing core course content are generally accessible to students. This sampling supports the trend indicated in the literature that students expect the instructor to provide printed copies or make lecture notes available for download from PPT presentations (Kinchin et al., 2008). Student survey question #5 responses indicate 81(97.6%) students believe PPT lectures may contain the key information for exams with 72 (81.9%) answering the PPTs contained the information "always" or at least "most of the tine." Student survey question #7 responses indicate 55 (66.2%) students admitted using PPT lecture notes at least "sometimes" to study for assessment rather than reading assigned materials and personal notes. Universally students in the focus groups and student interviews revealed that PPT notes and handouts were often used to the exclusion of assigned reading. Teresa, the graduate student, after four years' experience in the program area, summed up student comments:

…in some of my other classes, if everything that's going to be on their tests and quizzes that I've learned from having previous classes with them, if I know it's in the handout notes, then I feel I can look at those notes it's a lot faster, quicker way of getting the information than taking the time to read the textbook.

This is a significant finding as Gier and Kreiner (2009) maintained students who believed using these notes in the exclusion of reading may be disadvantaged in assessment opportunities.

Several students believed the actual process of writing notes by hand in class, as they read or adding to information outlines was a more productive way of learning than using instructor prepared notes containing all the content. Several students advocated a mixed approach to assessment preparation, including Cathy:

> …if I was just reading from a textbook, I wouldn't gain as much as if there was a PPT involved also. But if we were only going off of PPTs, then I lose the opportunity to really sit and contemplate…what the text is trying to teach me…. And so it's the combination, I think, of class lecture, and PPT, and the textbook. That when a professor focuses on just one of any of those three, that you really lose something in the process.

If, however, the handouts or PPT lectures contain all content material deemed important for the course assessment and are readily available online or in hand-outs, many students believed class attendance would suffer especially if the class time was utilized for content delivery to the exclusion of activities. Heidi stated:

> If you know that a professor posts their PPTs online, it encourages a lot of students to not attend class and to download the PPTs – if you know the teacher's style – and can learn everything that they're going to teach – just at home.

How does the Use of PPT Presentations, which Provide Course Content, Affect Student Assigned Readings and Other Traditional Class Preparation Methods?
When students were asked in the survey if they used PPT notes instead of assigned reading to prepare for assessment the results were mixed. According to student survey question #7, 20 (22.8%) students said they used the notes "always" or "most of the time." Another 36 (43.4%) students said "sometimes," and the

remainder of the respondents believed otherwise. Faculty survey responses were also mixed on generally the same levels.

But focus group responses clearly articulated a much stronger response. As in the literature review where a number of researchers evidenced a trend of students preferring instructor notes over assigned reading completion for test preparation (Clump et al., 2004; Ryan, 2006), students acknowledged an almost universal agreement for utilizing instructor prepared notes instead of reading for preparation for assessment. Judy's comment is representative:

> …as a student, it's kind of engrained in our brains to assume that the PPTs are the highlights of the chapter. And so, why in the world would I waste time looking through…reading all these words… most of the time, that's what PPTs seem to do – it's just the highlights and what's necessary to learn, or what the teachers make it seem what's necessary to learn.

The graduate student participating in the study has completed courses with every faculty member in the program area. After completing a four-year under-graduate degree the efficient way to success is explained by Teresa "… I know it's in the handout notes, then I feel I can look at those notes it's a lot faster, quicker way of getting the information than taking the time to read the textbook."

Just as reported in the literature (Maxwell, 2007), students perceive the teachers will highlight all of the material worth considering in the textbook, illuminating these in PPT lectures for test preparation. Unfortunately, students accept this efficient and time-saving system as a normal way of learning and disregard reading as an effective method of acquiring informa-tion. Openly and candidly, the students in focus group sessions explained the process. Holly stated:

> With PPTs, I feel it highlights exactly kind of what you need to know for the most part. And some-times, with some professors, they usually use those for test questions…for the most part; they usually highlight what's important from the text. And so that really helps, so I don't read after that.

With no intrinsic reason to read, students return their books and rely entirely on the instructor throughout the remainder of the course to deliver predigested informa-tion to memorize for assessment. Again, Holly stated:

Usually if…people know that the PPTs are going to be on the quiz, usually to save money, they'll return their books, so they don't have to worry about having to – have – you know – only get so much back later. And that way, they're already set for the tests in the class.

Emerging Themes

Through the process of data collection and initial coding, consciously and unconsciously, the researcher became acutely aware of two emerging themes. Survey data, comments from focus group and interview sessions, and the document analysis all contributed and confirmed to themes of generational information "sifting," and co-dependence of student motivation and reflective teaching practices in active learning environments.

Generational "Sifting" of Information from Digital Modes

The first theme to emerge from the data was the notion of generational "sifting" of information. In the second focus group, a unique discussion occurred concerning how and why today's college students read. Aaron commented:

> It also depends on if I'm really interested in whatever we're – the text is covering. Even if it's something that I already know, but I think I might get even just a little hint or tip out of something that I'll use later on, I'll go ahead and read the whole thing. But if it's something that I'm disinterested in, or…I think it's going to be… inapplicable to my life in some way, shape, or form, it discourages me from reading it.

Thus began an emerging theme in this research, the idea of a generation of information "sifters." Other students agreed, declaring only a portion of assigned material is read, the portion (a) deemed important to the specific topic relevant to the class or assessment; (b) perceived as exciting by them; and (c) presented in a manner and mode they choose, often through some type of digital delivery. Carol, a student focus group participant, explained students may actually read or study content based material on their own, but only if they perceive its importance. Carol stated:

> …a lot of times I found myself reading textbooks when it's not assigned. When it's – or if it's not even in the lectures, I find things that I find that pertain to what I want to learn, and I soak that up. And then sometimes I might look back and find

things later on in a chapter…it's when I find it necessary for me or productive for me.

Use of current visual technology is quickly learned and employed by students and has become an embedded part of their learning phenomenon. Teresa, the graduate student, talked considerably about this issue:

> And this upcoming generation has had the internet, technology, all at their fingertips since – almost since birth. If not, for some of the people coming in, their whole lives. And so they've gotten used to how simplified it is to do stuff that way.

Aaron, in particular, spoke of the characteristic of "sifting information' in a digital age with faster speed and more options than ever before. And if the information is not packaged in a manner appealing to these students, there is little chance for learning:

> Another thing is, this generation's – we were brought up to sift through information so fast. You know, and that's – any kind of medium or presentation – we're sifting. And I think we do it differently than generations in the past. And so, yea, if nothing catches your attention, then it's out.

There is an apparent consequence to this "sifting" in student learning styles. Teresa talked about the tendency for millennial speed in information technology to encourage generational instant gratification:

> You know it's – they've got this instant gratification issue where they're used to, you know, they want their high-speed internet, they're going to have their phones that have the internet on – they can look up anything, you know. They have the world at their fingertips, and they've gotten so used to…they've been spoiled by having everything done for them.

Co-Dependence of Student Motivation and Teacher Reflective Instruction

The second theme that emerged in the study was a unique co-dependence in the active learning process of student motivation and teachers' reflection when developing and directing instruction. Song et al. (2007) posit "learning is a shared enterprise" (p. 27) involving teachers and students where teachers have the "capacity to perceive and respond to students, as well as to design instruction to promote successful student learning" (p. 33). Effective learning relies on mutual respect between students and teachers. Without respect, there is little hope of cooperation to motivate and engage students.

In this educational mode, both teacher and student are responsible for weaving an atmosphere of learning. Song et al. explained:

> It is important to examine the co-dependencies of a shared teaching-learning enterprise to help instructors understand student needs, identify teaching strategies that help facilitate learning, and determine how and when to accommodate them. Concurrently, it is important to examine how students adapt and accommodate their learning strategies based on awareness of the beliefs and practices of the instructor. In effect, each might be able to better identify when and how to reconcile their beliefs and strategies to align their efforts and promote learning success. (p. 37)

These activities, whether PPTs, discussion, debates, or application exercises, are, by necessity, reflectively planned and modified by the instructor. It is crucial, as Song et al. (2007) explained, for teachers to reconcile their pedagogical practices to student learning expectations through examination and alignment of teaching and learning expectations and beliefs. Student motivation to respond to assigned student reading, for example, is often driven by the pedagogy of instructors. The reasons for reading, selection of materials, the worth of weekly assessment, and the informed use of PPT are all entwined in the classroom experience. The development of a teaching paradigm encouraging discussion, debate, and activities, spurred on by Socratic teaching and dialogue, can be effective as verified in the literature and in research participant responses. However, development of a new learning paradigm requires instructors to be reflective of their teaching styles and willing to modify instruction to accommodate student needs. Likewise, student responsibility to respond to teacher initiatives requires a measure of respect and integrity.

Implications for Practice

The study findings indicate the importance for teachers to be reflective, not only in the design and use of PPT in the classroom, but of teaching and learning theories and practice overall. The findings underscore the impact an instructor has on the learning process from choice of textbook and use, to curriculum and assessment design, classroom activities, and student relationships. In this entire process the positive motivation of students in the learning process is crucial if learning is to occur. In all of these facets of teaching and learning, teacher integrity, reflection, and response are central.

Observation and research into current teaching and learning can provide a useful lens to examine our everyday practices as teachers and administrators avoiding a myopic view, which seems natural to our epistemic eyes. In this manner, we may be able to recognize the ways and means reconciliation occurs between teaching beliefs and instructional practice.

This study emphasizes that no longer can instructors teach what and how they want exclusively if they desire interaction and response from generational "sifters" toward active learning experiences. This may require teachers to reconcile their pedagogical beliefs and practices. For some in this study, and possibly in the larger field of higher education in general, this would appear a challenging task.

Teachers, when implementing the strategies found in this research, should be positive with purpose for the goal of active learning in the classroom, but not naïve in believing every student will respond. Varied instructtional delivery and active learning activities come at a price. Faculty schedules are many times fully loaded with requirements for service, research, and scholarship, as well as teaching. Continued competition for university resources can often incur an increase in faculty teaching load. Teachers will need to carefully balance the tremendous worth of reflective course design and modification to a reasonable workload. Weekly assessment can be daunting to those instructors not accustomed to preparing quizzes and the class time required for administration and grading. Many instructors, such as the researcher, utilize electronic online assessment through BlackBoard, allowing assessment to be given over a period of time prior to class with all calculation of grades and posting of results automatically rendered to student Blackboard pages. This researcher has found this system to be efficient and requires no in-class time for individual assessment.

Constructing interactive PPT with opportunities for imagery, stories, and activities often requires new technology and interpersonal skills for successful class presentations. Socratic questioning and dialogue can be daunting to some and requires a measure of vulnerability as students query and question into often uncharted concept areas.

Student centered learning has attributes centered on the goal to motivate and engage students. In this model both teacher and student are responsible for weaving an atmosphere of learning. Instead of relying on student motivation alone, which is often erratic and inadequate,

or teacher motivation alone without critical reflection, a synthesis motivation and pedagogy with purpose theoretically can provide dynamic learning environments. This model often has three pivotal reflective steps: (a) informing the student through student reading, other research, and weekly assessments to motivate reading; (b) student learning experiences through informed and judicious use of PPT, class discussions, dialogue and active learning exercises; and (c) the engagement of students in applied assignments in and out of class utilizing group activities and projects. For adventurous teachers willing to experiment with a plethora of visual media and activities of this digital age, come great opportunities for student engagement. Coupled with informed reflective pedagogy, and an understanding of student learning requirements, instructors can remain relevant to student information "sifting" while maintaining rigor in their disciplines.

Conclusion

These mixed method study findings strongly underscore the importance of student preparation for classroom activities and instructor modes of content delivery in higher education. Without some method of motivation to complete assigned reading allowing students to gain a command of course content, class time will unavoidably be filled with content based lectures, most delivered with PowerPoint and available for download by students. Findings in the literature, supported by this study, indicate students will then rely on professor's distilled notes for their learning experience to the exclusion of assigned reading. Opportunities for active learning through discussion, debate, and other activities will diminish as class time is occupied with class information content delivery.

Moreover, this research highlighted an understanding and realization of the co-dependence of student motivation and reflective instructor teaching and learning activities which provide a framework conducive to active learning. Teachers, as leaders, have intrinsic power from their position in the classroom to reconcile instructional methods to learning styles cultivating opportunities for active learning supported by student reading preparation. Hopefully, these measures will enable instructors in higher education and new generational information "sifting" college students to find common ground in the continuously changing culture of learning.

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The Relationship between Student Performance on Teacher Education Examinations and Cohort and Non-Cohort Delivery Models

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Abstract

This study used an ex post facto causal-comparative research design to investigate whether the type of delivery model undergraduate elementary majors participated in (cohort vs. non-cohort) was related to their performance on the Praxis II Principles of Learning and Teaching (PLT) *exam. An ANOVA was performed to investigate differences in candidate scores on this examination. Significant differences were found, with the non-cohort group performing significantly higher than the cohort groups. Potential reasons for these differences are explored. Recommendations for practice and future research are presented.*

Introduction

Teacher education in the United States is once again in crisis. Educational policymakers and teacher education practitioners are persistently occupied with curriculum development, as well as the ever-changing national and state policies concerning teacher preparation (Mayer, 2005). Institutions of higher education (IHE) must continually supply the K–12 system with quality teachers who are prepared to meet the demands of the modern school, especially in specific subject areas where personnel shortages abound (Hussar, Bailey, & National Center for Education Statistics, 2007). Teacher education programs (TEP) are faced with the challenges of preparing teacher education candidates who are competent, caring professionals for diverse and contemporary classrooms (Cochran-Smith & Power, C., 2010).

The United States Department of Education has predicted that public schools will need more than 4.2 million teachers by 2016, an increase of 18% from 2004 (Hussar, Bailey, & National Center for Education Statistics, 2007). Many pre-service teachers attend traditional teacher preparation programs. These generally involve spending 4–5 years in on-campus college or university programs. These programs tend to serve undergraduate and post-baccalaureate students without prior teaching or work experience, leading to a bachelor's degree in education (Department of Education, 2010).

While many potential teachers attend these 4-year college programs to receive their degrees, a substantial number of teacher education candidates select community colleges as a starting point in their education because they are either geographically or economically bound to a specific region within their state. In addition, a number of these candidates are non-traditional, meaning they are older and may already be in the workforce and/or may be "place-bound" due to family responsibilities (Schuhman, 2002). In recognition of this reality, the American Association of Colleges for Teacher Education (AACTE) states that "Reducing the teacher shortage requires strong collaboration between 2- and 4-year institutions" (Schuhman, 2002, p. 6). This reality has led many teacher education programs to develop stronger collaborative partnerships with community colleges in order to prepare pre-service teachers. Often, this has involved the development of articulation agreements to support the transition of matriculating from one center of higher education to another.

These programs differ from traditional teacher education programs as candidates spend two years at each institution prior to graduation. They are generally known as 2+2 articulation programs. In recent years, some of these 2+2 programs have developed a new model, which requires a very close working relationship between the university and community college. This model involves having all coursework during the 4-year period conducted on-site at the community college campus so that candidates who live near them will not have to travel to 4-year college or university centers to complete their college degree. In this model, the students take their first two years of study at the community college as students of that college. After completing an Associate of Arts in Teaching (AAT) or

an Associate of Science in Teaching (AST) degree at the community college, candidates are enrolled in the university program and graduate from that institution. During their last two years of matriculation, they become students of the four-year college but remain on the community college campus and take all of their courses there. The 4-year university hires faculty who teach on the community college campus. In general, they are using the same curriculum as is used in the on-campus program. This model is also known as a 2+2 program.

Delivery Models in Teacher Preparation

Teacher education candidates in institutions of higher education (IHE) are sometimes defined as being individualistic and isolated (Goodlad, 1990). Some universities have adopted the cohort model to overcome this isolation. The term *cohort* is commonly defined as a group of people who stay together from the beginning to the end of a program and grow through the process, experiencing essentially the same stimulus material and challenges of the work environment (Goodlad, 1990). The cohort program is designed to create learning environments based on building communities of learners (Dinsmore & Wenger, 2006). Within these learning communities, the pre-service programs design their curricula around the learners and simultaneously teach methods and content (Mather & Hanley, 1999).

Measuring Graduate Competence

Licensure is the credentialing by a state for teacher candidates who meet established state-mandated regulations. The requirements and procedures for obtaining a teaching license may vary from state to state, and continue to change as they reflect standards and expectations for performance. This study occurred in Tennessee. In this state, each identified teacher of record must hold a valid license. All local education agencies receiving state funding are accountable for assuring their teachers are licensed and they must report personnel and verify their credentials annually. One of the elements of this licensing is passing the *Praxis II PLT* examination.

While passage on the *Praxis* is not a guarantee of effective teaching, it has been recognized as a necessary graduation requirement in Tennessee. While several studies have been conducted to predict the pass rates for Praxis II (a required test for teachers in many states), little to none have been found to predict pass rates for the Praxis II PLT.

The Purpose of the Study

This study investigated the degree to which the cohort and non-cohort delivery model was related to student performance on Praxis II PLT. The sample included student groups enrolled in a traditional NCATE accredited, on-campus teacher education program with no cohort grouping, and eight off-campus teacher education sites that were embedded into community colleges in the 2+2 model. This model follows the 2+2 model previously described and consists of baccalaureate programs comprising two years at the community college followed by the junior and senior year of a 4-year baccalaureate program, taught by faculty from the 4-year program who teach full time at the community college site. Students in these programs are organized into a cohort group, meaning they take classes together throughout the last two years of study.

Prior to completing their program candidates in all of these programs must pass the Praxis II Principles of Learning and Teaching, an examination designed to assess a beginning teacher's knowledge of a variety of job-related criteria. Such knowledge is typically obtained in pre-service preparation in areas such as educational psychology, human growth and development, classroom management, instructional design and delivery techniques, evaluation and assessment, and other professional preparation (ETS, 2008).

The study investigated whether there were significant differences between the *Praxis II* scores of candidates in eight 2+2 cohorts and those of candidates in the university's traditional non-cohort delivery model. The study took place at a southeastern, NCATE accredited, regional institution of higher education in Tennessee. Candidate data were collected on all Multidisciplinary Studies Human Learning (MDHL) and Multidisciplinary Studies Elementary (MDSE) program completers from the spring of 2005 to spring of 2010.

The Historical Role of Community Colleges in Teacher Education

In this time of insecurities, national, state, and local leaders must learn to collaborate with institutions of higher education in order to build, retain, and sustain a teaching force. When questioned about the community college's role in teacher education, the National Association of Community College Teacher Education Programs (2009) stated:

> Many community colleges offer associate's degrees in teaching that transfer to four-year institutions.

While most community college programs provide only the first two years of a four-year teacher preparation program, some states are also allowing community colleges to offer full certification programs to meet critical shortages. In addition, some four-year colleges and universities are offering their teacher preparation programs on community college campuses. (p. 4)

While partnerships between institutions of higher education and two-year colleges have been around for decades, the idea of housing the last two years of a four-year university teacher education program at the community college began emerging nationwide in 2002 (AACTE et al., 2002; Blair, 2003; Imig, 2002; Schuhman, 2002). Judging from letters and phone conversations among the presidents, and comments made at a March, 2003, Tennessee Board of Regents meeting, the majority of Tennessee's community college presidents expressed considerable interest in such a venture (Garber, 2006). In 2003, the Education Commission of the States (ECS) predicted that

"We will see greater awareness of the tie between community college and economic development, more effort on the part of community college leaders to demonstrate their responsiveness to the needs of local businesses, increasing enrollment as laid-off workers seek training…." (Christie, 2002, p. 262)

For these reasons, ECS believes there will be an expanded role for community colleges in preparing teachers (Christie, 2002).

Today, the country is looking to the community college for help in resolving the national teacher shortage. These efforts can be attained by traditional 2+2 articulation agreements, four-year baccalaureate degree programs in teacher education, in-service preparation for practicing teachers, or by more controversial methods such as alternative teacher certification programs (Townsend & Ignash, 2003). "Teacher preparation's inclusion into the community college made education seem commonsensical" (Garber, 2006, p. 2). Education is more economical at the community colleges, and their campuses are often conveniently located. At a minimum, the majority of community colleges have created an Associate of Arts in Teaching (AAT) or an Associate of Science in Teaching (AST) (St. Arnauld, 2005).

The Cohort Model of Teacher Education

University programs for pre-service teachers are delivered through a variety of organizational patterns or models. As previously noted, one variation is the teacher cohort model, which is designed to increase a sense of community and foster student success (Dinsmore & Wenger, 2006).

In order to be effective in rural areas pre-service and novice teachers must build such relationships and identity with the community they plan to teach; this process begins with where and how they are trained (White & Reid, 2008). By forming cohorts in these isolated areas, pre-service and novice teachers are able to develop a consciousness of their surroundings and place significance for their teaching (Burton & Johnson, 2010; White & Reid, 2008).

Teacher education programs continually experiment with organizing or grouping candidates into collaborative learning communities. These groupings are known by names such as vanguard teams, university centers, peer groups, professional learning communities and cohorts. The term *cohort* in education is widely considered as a group of candidates that is organized by the college or department, usually for a period of no less than two years, where all or the majority of the courses are taken together (van der Wey, 2005). Saltiel and Russo (2001) suggested that defined membership, common goals, and structured meetings over time play a part in the definition and formation of cohorts. Saltiel and Russo further stated that cohort-based programs are more than learning communities, because the cohort model requires a deeper level of commitment and cohesiveness when candidates are assembled into a construct built from a common curriculum that extends throughout a given time. By using the same methodology, candidates can learn to work together in collaborative communities that practice teaching together.

A critical analysis of cohort groupings has surfaced, and researchers have looked at both the positive and negative aspects of cohorts. The findings from these studies indicate that personalities of the members of the cohorts affect how the cohort operates as a whole, whether it is as a team, a dysfunctional family, or something in between (Mather & Hanley, 1999; Sapon-Shevin & Chandler-Olcott, 2001). The ideologies/ philosophies driving the cohort initiative are derived from clearly advocated ways for teacher education candidates to become more involved in the learning

process, and to become empowered by their own professional development (Barnett & Caffarella, 1992). One study described cohort groups as an effective model when restructuring a teacher education program and went on to state that the primary focus of the program implementation was communication and human interaction (McIntyre & Byrd, 2000).

Praxis II Series Assessments and the PLT

The reauthorization of the Title II Higher Education Act (P.L. 105-244) mandated that institutions of higher education report pass rates of teacher exams on all TEP candidates (U.S. Department of Education, 2006). Currently, 45 out of the 50 states and the District of Columbia, Guam, and the U.S. Virgin Islands require candidates to take and pass a version of the Praxis II exam before receiving a license to teach (Praxis II Test Review, 2010). Eighteen states, including Tennessee, and the Department of Defense Education Activity, their education area, require that teacher education candidates pass the Praxis II Principles of Learning and Teaching exam to obtain a license (ETS, 2010). The PLT exams have been designed for pre-service teachers enrolled in teacher education programs.

The Praxis II exams are designed to assist teacher education program completers with initial licensure requirements (Educational Testing Services, 2008). The Praxis II Principles of Learning and Teaching exam is designed to assess a beginning teacher's knowledge of a variety of job-related criteria. Such knowledge is typically obtained in pre-service preparation in areas such as educational psychology, human growth and development, classroom management, instructional design and delivery techniques, evaluation and assessment, and other professional preparation (ETS, 2008).

Tennessee pre-service teachers must take and pass at least two exams: one over general or specific content knowledge within the candidate's specialty area, and another that addresses teaching pedagogy at varying grade levels known as the Principles of Learning and Teaching (PLT) exam (Educational Testing Services, 2008). Candidates seeking licensure in elementary education must take the PLT (K–6) exam (Test code 0522) (Educational Testing Services, 2008). The Tennessee State Board of Education and the Tennessee State Department of Education Office of Teacher Licensing currently require the submission of Praxis scores. In order to fulfill the current requirements for an initial license with an endorsement to teach elementary grades K–8 or K–6, candidates must receive a minimum score of 155 on the Elementary Education K–6 Principles of Learning and Teaching exam.

As noted by Clauser, Margolis, and Case (2006), "A passing score on a licensure examination may be seen as a prerequisite for acceptable practice, but not as a guarantee of acceptable practice" (p. 717). Clauser et al. attributed this statement to the difference between perception and performance: test takers may have requisite knowledge but not demonstrate that knowledge in the classroom. The Educational Testing Service (2006) has acknowledged that inferences based on teacher preparation credentialing exams are not predictors for future classroom success.

Methodology

An analysis of the Praxis II Principles of Learning and Teaching (PLT) scores for the state licensure exam was conducted, with a focus on any overall differences in mean scores of candidates participating in a cohort-based program compared to those in a non-cohort delivered program. Descriptive and inferential statistics were used in data analysis. The key independent variable for this study was the participation of candidates in a cohort or non-cohort model. The dependent variable for this study was the scores earned by each candidate on the Praxis II Principals of Learning and Teaching (PLT) exam. Praxis II PLT scores were recorded as raw scores in SPSS.

Though this was not an experimental treatment, the difference between the two groups is that one was a traditional non-cohort model (university main campus) and one was a cohort model (community college site-based) of teacher candidates. All candidates must meet the existing licensure requirements, whether the program is offered on the main campus or in the 2+2 onsite cohort. For example, all candidates were required to meet all knowledge, skills, and dispositions necessary for entrance into the Teacher Education Program (TEP). The benchmarks established for TEP incorporated admission into TEP, admission to student teaching, and exit program protocols.

This research was guided by the following research question.

1. To what extent do differences exist in Praxis II Principles of Learning and Teaching (PLT) exam scores between non-cohort groups at a single southeastern institution of higher education (IHE) and cohort groups involved in 2+2 off campus programs?

The sample for this study consisted of 1,161 Multidisciplinary Studies Human Learning (MDHL) and Multidisciplinary Studies Elementary (MDSE) candidates who graduated from the teacher education program from the spring of 2005 to spring of 2010. The Praxis II PLT exams were taken by all candidates in the teacher education program to fulfill requirements for certification and licensure. All TEP candidates involved in this study completed an approved program of study, including coursework, field-based and clinical experiences. Of the 1,161 candidates involved in the study, 717 participated in a cohort delivery model represented by eight sites, while 444 were enrolled in a non-cohort model.

Hypotheses

A three-way ANOVA at $\alpha = .025$ level of significance was used to answer research hypothesis 1 (H_O1) after adjusting for the experiment wise error rate using the Bonferroni adjustment technique (used to account for interactions between other extraneous variables. For the purpose of this research those items were excluded).

H_O1: There is no statistically significant difference in candidate scores on the Praxis II Principles of Learning and Teaching exam between a non-cohort group in a university campus setting and cohort groups in university programs on community college campuses.

Significance

This study can provide higher education, community college, and teacher preparation administrators with reliable assessment data concerning the effectiveness of cohort-based education related to traditional pedagogical program instruction. Furthermore, the information gathered in this study can be used in planning and implementing cohort curricula characterized by a seamless transition from community colleges to institutions of higher education. Findings can also provide colleges of education with new insights into the area of professional learning communities/cohorts that may help candidates pass the Praxis II PLT exam on the first attempt. Finally, results of this study may provide insights needed for community colleges and universities to review the NCATE standards concerning the feasibility of extending accreditation status to teacher education programs housed at community colleges.

Results of Hypothesis Testing

A three-way analysis of variance (ANOVA) was conducted to investigate Praxis II Principles of Learning and Teaching (PLT) exam score differences between non-cohort and cohort groups. ANOVA results, presented in Table 1, showed a significant main effect on ONOFF ($N = 1161$, $F = 8.38$, $p = 0.004$) and ENTRYGPA ($F = 29.61$, $p = 0.000$). Interaction between factors was significant between ONOFF and ENTRYGPA ($F = 4.15$, $p = 0.016$).

Table 1

Tests of Between-Subjects Effects

Source	Type III SS	df	MS	F	p
ONOFF	865.257	1	865.257	8.383	.004*
AGECAT	122.278	1	122.278	1.185	.277
ENTRYGPA	6113.530	2	3056.765	29.616	.000*
ONOFF * AGECAT	107.415	1	107.415	1.041	.308
ONOFF * ENTRYGPA	855.930	2	427.965	4.146	.016*
AGECAT * ENTRYGPA	113.221	2	56.610	.548	.578
ONOFF * AGECAT * ENTRYGPA	260.790	2	130.395	.283	.283
Error	118592.684	1149	103.214		

*Indicates significance at $p < .025$

Findings

Based on the results of the ANOVA, Null Hypothesis 1 (H_O1) was rejected. The test confirmed a statistically significant difference in mean PLT scores for candidates enrolled in the non-cohort group as compared to the PLT scores of candidates enrolled in comparable cohort groups, with the non-cohort group scoring higher than the cohort group.

Discussion

This study revealed that candidates instructed in the non-cohort delivery model performed better on the Praxis II Principles of Learning and Teaching exam than those instructed in the cohort delivery model (H_O1). The findings of this study were in contradiction to the findings of Saltiel and Russo (2001) who suggested that students in cohorts were stronger

because of the commitment to the group. Mather and Hanley (1999) also noticed the apparent influences and advantages of the cohort due to class size and teaching approach.

The data did not indicate that the cohort delivery model had a significant effect on PLT scores. It is difficult to know exactly why these differences occur. Nevertheless, it should be noted, that while the difference in Praxis II PLT scores between cohort and non-cohort were found to be significant, the difference was less than three points. It is also worth mentioning that this difference may be due to the disproportionate number of candidates enrolled in the cohort versus the non-cohort model.

The research institution selected the cohort approach as a viable delivery option for reasons such as the inherent social benefit, smaller class sizes, and the opportunity for peer mentoring, modeling and class discussion. However, the major justification for implementing the cohort program was that many rural and/or economically depressed candidates gravitated toward the community college venue as a practical alternative for higher education. There are no data to determine whether the curriculum delivered at the community college level was delivered at the same level as that delivered on campus and whether there is a need to examine the fidelity of the off-campus program.

Some research studies have established incongruities between the academic performance of community college transfer students and native university students (Glass & Harrington, 2002), while other studies designated a strong similarity in academic performance between native and transfer students (AACTE, 2002; Recruiting New Teachers, 2002). It is unknown why college students pick one institution of higher education over another. The possibilities range from monetary to familial, academic competency to personal maturity. Further research is needed in order to increase program perspectives built on academic performance outcomes between candidates who began their college career in a community college opposed to those who began at a four-year institution.

The majority of recent research performed on cohorts has been qualitative in nature (Agnew, Mertzman, Longwell-Grice, & Saffold, 2008; Mather & Hanley, 1999; McPhail, Robinson, & Scott, 2008; Saltiel & Russo, 2001; Sapon-Shevin & Chandler-Olcott, 2001; Seifert & Mandzuk, 2006) and therefore, difficult to establish a correlation to the quantitative results found

in this study. Barnett, Basom, Yerks, and Norris (2000) suggested that an examination of the challenges linked to cohort instruction should become a vital research component for institutions of higher education, "especially if this innovation is to become more than a passing fad" (p. 256). Conversely, as White and Reid (2008) discussed, the main drawback of cohort instruction was that the place of instruction was too often removed from the culture of the community in which the novice teacher was placed. Further research into why this particular cohort group did not appear to provide adequate support for students to perform at the level of on-campus students needs to be conducted. Recommendations related to such study are contained in the sections that follow.

Recommendations for Practice

The findings suggest that cohort models may need to be strengthened in 2+2 settings. There also may be some issues related to the way in which the curriculum is being delivered at these sites. It is recommended that universities work with local community colleges to ensure that similar coursework is provided and artifacts are developed that are aligned with the state and national standards for elementary education. The AST and AAT degrees, awarded by two-year programs, are considered vehicles for such a task.

It is recommended that university advisors work with community college advisors to maintain strong relationships built on the foundation of strong articulation agreements that benefit the transfer candidate. It is important to assure that the cohort group model is providing adequate opportunities for students to form learning communities, rather than just taking classes together.

Recommendations for Further Research

There was a limited amount of research concerning cohort groupings at the undergraduate level and their relationship to academic achievement as measured by standardized testing at the completion of undergraduate work. This gap in research could be due to the fact that educational cohort groupings are still considered somewhat a new strategy, especially in a 2+2 setting. The following recommendations were established from the findings and conclusions of this research study and are suggestions for future research.

Since the numbers were so small for cohort groups, and the differences also appeared to be minimal, a replication of this study may be useful to determine if differences in performance really exist. Studies relative to the cohort

model being delivered at these sites should be conducted. Examinations should be made as to whether these groups are following best practices. Likewise, investigations should be conducted to determine whether time limitations hinder the creation of strong cohort relationships.

It might also be helpful to investigate the degree to which curriculum is being delivered appropriately at the 2+2 site. Examining tests and the rigor and content of the curriculum may be useful.

A longitudinal research project involving qualitative research should be considered. Inquiries into the areas of program satisfaction, self efficacy, team collaboration, and peer mentoring would provide an additional source of information for the development of a knowledge repository required by teacher education programs in order to make an informed decision concerning the effectiveness of the cohort delivery model.

It might be useful to develop a study regarding recruitment of candidates in cohort and non-cohort sections. Additional descriptive statistics could be gathered to further define the population academically. In addition to this research, a variable could be added as to whether or not candidates enrolled in the non-cohort were "native" to the main campus or transfer students from another college or university. This would broaden our knowledge and provide dimensions not examined in this work.

It is recommended that future research is needed to determine predictable academic outcomes based on whether or not cohort groupings were in urban or rural areas. The identification and tracking of candidates' field and clinical placements would be categorized based on indicators of urban or rural locations.

A study should be conducted on the social adjustments, or "transfer shock," of community college candidates. Furthermore, this research could help discover whether or not the shock of moving from a two-year program to a four-year Teacher Education Program has an effect on academic performance outcomes such as the Praxis II Principles of Learning and Teaching exam.

Finally, since this study was conducted in only one setting, in a single state, it is recommended that a study be considered on cohorts and non-cohorts involving more than one university teacher education program. A more comprehensive perspective using data from an entire state or multiple sites across a region could provide more in-depth information about the issues addressed. The study could draw conclusions based on demographics from a more diverse population and, therefore, a wider scope and application could be gained from the comparison.

Conclusion

It is important to identify the impact delivery models may ultimately have upon student learning. The effects of the cohort delivery model in undergraduate teacher education programs are yet to be determined. A single study at a southeastern, NCATE accredited, regional institution of higher education cannot exclusively determine what needs to be reformed or redesigned in teacher education. The implications for additional empirical research are not only evident, but also vital to the success of preparing pre-service teacher candidates.

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Benchmarking Progress in a Doctoral Cohort: A Follow-Up Study of Student Perceptions

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Abstract

Marshall University launched its first statewide Ed.D. cohort in fall 2007. Seventeen of the original 20 students remain in the program, have completed their coursework, and are at varying stages of the dissertation process. Based on findings from a spring 2008 student survey, an interim assessment of this program was published in the October, 2009 SRCEA Yearbook. In an effort to benchmark changes in student perceptions, a follow-up survey was conducted in spring 2011. This article presents the findings from the 2011 survey, compares them with the 2008 findings, and provides lessons learned and recommendations for developing doctoral cohorts.

In the Fall of 2007, Marshall University's Graduate School of Education and Professional Development (GSEPD) initiated its first statewide doctoral level cohort program. To provide an initial assessment of this initiative, the authors conducted a baseline survey of cohort participants in September 2008. The findings from this initial survey were published in the fall 2009 SRCEA Yearbook (Tuckwiller & Childress, 2009). A second survey, designed to assess program implementation and determine if there were changes in perceptions based on participation in the cohort, was conducted in May, 2011. The purpose of this article is to present an analysis of the findings from the 2011 survey, compare these findings to those from the 2008 study, and confirm or modify the 2008 guidelines/recommendations for developing doctoral cohort programs.

The program began with 20 candidates divided approximately evenly between those selecting Leadership Studies (LS) and those selecting Curriculum and Instruction (C&I) as a major. Candidates were fully employed, experienced public school or higher education faculty and administrators. The program was conducted at an off-campus site approximately 75 miles from our South Charleston campus.

The admissions criteria (e.g. MAT/GRE scores, professional recommendations, writing sample, and interviews) used to select cohort candidates was the same as that used in the regular on-campus program. Courses were delivered off-campus in a public middle school about 75 miles from Marshall's South Charleston campus. This location, in the geographic center of the state, was selected to facilitate candidate access to the program.

Cohort students enrolled for two courses each semester and classes met face-to-face one weekend a month each semester. One class met on Friday evenings from 5:00–9:00 p.m. and the second class met on Saturday from 9:00 a.m. until 2:00 p.m. The first hour of the Saturday session was sometimes used by the program coordinator for advising, addressing logistical/administrative issues, and to provide an opportunity for cohort members to become better acquainted with other faculty not directly involved in teaching cohort classes. Face-to-face class meetings were supported through Blackboard, Skype, Wimba, and other interactive technologies.

To ensure a critical mass of candidates, program faculty modified the on-campus program course requirements to accommodate both C&I and LS candidates in this off campus program. Approximately 80% of the required courses were common to both groups with the remaining courses selected specifically for the LS or C&I majors. Candidates determined their major in consultation with program faculty during the admissions and interview process. The expectation was that the dissertation topic would also reflect the applicable major. The remaining program interventions/activities (e.g. candidate seminars, portfolio development and presentation, etc.) remained essentially the same as they were in the on-campus program.

The model/theory of change undergirding the cohort program is illustrated graphically in Figure 1. The underlying assumption is that if appropriate resources/inputs (e.g. faculty, candidates, curriculum, etc.) are provided, and if relevant interventions/activities (e.g. course delivery, advising, seminars, etc.) are conducted,

a series of short-term or proximal candidate outcomes will be achieved. Further, it is believed that achievement of these short-term outcomes will result in achievement of the long-term or distal program outcomes.
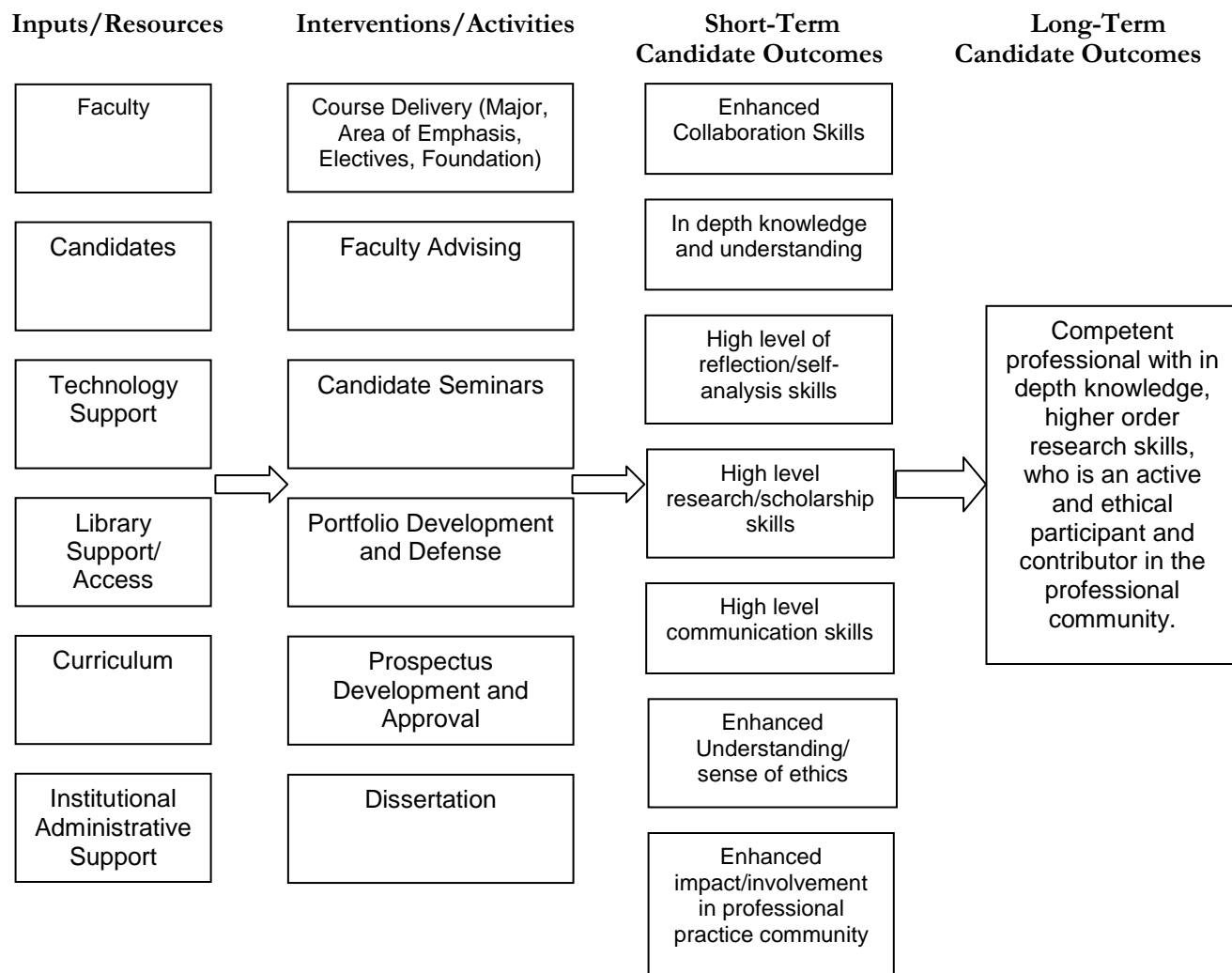
Inputs/Resources	Interventions/Activities	Short-Term Candidate Outcomes	Long-Term Candidate Outcomes
Faculty	Course Delivery (Major, Area of Emphasis, Electives, Foundation)	Enhanced Collaboration Skills	
Candidates	Faculty Advising	In depth knowledge and understanding	
Technology Support	Candidate Seminars	High level of reflection/self-analysis skills	Competent professional with in depth knowledge, higher order research skills, who is an active and ethical participant and contributor in the professional community.
Library Support/ Access	Portfolio Development and Defense	High level research/scholarship skills	
Curriculum	Prospectus Development and Approval	High level communication skills	
Institutional Administrative Support	Dissertation	Enhanced Understanding/ sense of ethics	
		Enhanced impact/involvement in professional practice community	

Figure 1. Doctoral Cohort Program Model and Theory of Change

Study Objectives

Specific objectives for this study were to:

- Compare 2008 and 2011 doctoral cohort participant perceptions regarding:
  o Applicability of the cohort model.
  o Program content/instruction.
  o Program format/delivery.
  o Interaction (with faculty and peers).
  o Support and resources.
  o Portfolio opportunities.
  o Advisement/guidance.
  o Dissertation preparation.

- Develop/verify "guidelines/recommendations" for other institutions considering development of cohort doctoral programs

Literature Review

The literature review for the 2008 study yielded broad support for the cohort model applied in Master's programs and business and industry professional development programs. Research specific to doctoral cohorts was less plentiful, with administrators and doctoral cohort participants reporting general satisfaction with experiences with the model at that level. Several authors suggested additional research to

provide insight into factors affecting the strengths and limitations of applying the cohort model at varying levels in education. Literature reviewed for the 2008 survey will be summarized, followed by a brief presentation of more recent literature related to cohort model applications.

Barnett, Basom, Yerkes, and Norris (2000) discussed the literature with respect to the group dynamics of a cohort—that members tend to report a feeling of belonging, importance, acceptance, and a sense of purpose. The commitments and experiences of cohort learning support the probability of a group's success. These authors point to positive relationships between cohort experiences and overall academic success, reflective skills, commitment, motivation, and work-place leadership. They also studied faculty perspectives on cohort versus non-cohort program delivery. Positive factors included efficiency, advisement, and relation-ships with school districts and students. Limitations included organizational and structural concerns, inflexible course schedules, large course loads, and unrealistic expectations on the part of students and faculty.

Fallahi and Gulley (2008) outlined reasons why institutions of higher education were moving toward application of the cohort model. Among them are student retention, budget and staffing projections, program sustainability, and service to marginalized students. Students also identified class size, student collaboration, and pre-planned scheduling as positive attributes of such programs. Fallahi and Gulley concluded that students generally report a positive social and academic climate in the cohort model program.

Collins, Rickey, and Bradley (1998) discussed positive cohort factors including weekend format, connection between theories and coursework and classroom application, overall program design, cohesiveness, program sequencing, personal attention from faculty, and communication. Challenges discussed by the Collins group included library and resource access, weekend format, faculty work load, commitment of students over the entire six quarters, and distribution of student advising load.

Bentley, Zhao, Reames, and Reed (2004) described their Auburn University cohort doctoral experience using Bolman and Deal's (1997) four leadership frames (political, structural, human resource, and symbolic) as a framework. The political frame encompassed emergence of leadership roles among individual cohort members, with the professor as a tour guide, and students receiving guidance in choosing routes to reach a destination (completion of the program). The structural frame included student goals and objectives, learning environment, scheduling, and organizational relationships developed during the cohort program. The human resource frame illustrated the family structure of the cohort, identifying the professor as head of the family, cohort students as siblings, and underscored the critical need for collaboration, problem solving, teamwork, and honesty in developing a functional family relationship. The symbolic frame presented the cohort as a culture with traditions, teams, societal roles, shared talents, and suggested equal importance be given to fostering internal and external support for cohort members.

Unzueta, Moores-Abdool, and Donet (2008) discussed factors identified as cohort program strengths—family-type experience, social interaction, cohesiveness, common mission, collaboration, success, networking, attention, and support from peers and faculty. Disadvantages identified included inflexibility of program structure, full class load for those employed full-time, dissatisfaction with facilities, and interaction with a small group of peers. These factors were echoed by McPhail, Robinson, and Scott (2008). Tarielo (2007) adds mentoring, creativity, personal development, and individual instructors as cohort strengths.

Contributions to the literature since 2008 provide additional support for the application of the cohort model in doctoral education. Nimer (2009) identified cohort communication and socialization as reasons for positive relationships among and between students and faculty. Fahlman (2011) shared "stories" from the first doctoral cohort in education at Athabsca University as he touted the value of reflective practice (storytelling of experiences) to evaluate and modify cohort programs based on what individual participants (students and faculty) perceived as the positive and negative characteristics of that program. Pemberton and Akkary (2010) analyzed feedback from participants in an educational leadership doctoral cohort, focusing on the implications of the model for forging natural groups. The authors consider this capacity of the cohort model to be relevant and empowering to both student and faculty participants. They encourage program admini-strators to explore this empowerment characteristic of the cohort model as they develop or choose a model for curriculum delivery at the doctoral level.

Based on the literature review for the 2008 study, and the recent literature review update, authors generally do not provide blueprints to guide an individual or institution through the doctoral cohort planning and development process. Researchers report that participants in graduate level cohorts identify common program strengths and limitations. Common program limitations identified by reflective participants suggest systemic programming issues and support the need for further research.

Methods

The research method used for this study was a descriptive cross-sectional design (Fink, 2003). Cross-sectional surveys provide information on existing groups and gather descriptive data at one fixed point in time. The 2011 instrument was administered in May as a part of the last cohort class meeting for the spring semester. A concept analysis of participant responses to each survey question was conducted and the findings from the 2011 survey were compared to the findings from the 2008 survey. Participants had completed course work and were preparing their portfolio projects for admission to candidacy and initiation of the dissertation process at the time of the May 2011 survey. The instrument used in both the 2008 and 2011 surveys consisted of a series of open-ended questions to which cohort participants were asked to respond. Both instruments reflected topics recommended by cohort faculty and administrators, and sought perceptions about reasons for cohort participation and identification of strengths and limitations of the cohort model. Participants were also asked to provide perceptions about program/course content, format, instruction, delivery, and opportunities to interact with other students.

The 2008 instrument contained 11 items and the 2011 instrument was essentially the same except for the addition of two items. Since cohort participants had completed their major, area of emphasis, and foundation courses at the time the 2011 survey was administered, an item regarding perceptions of their level of preparedness for beginning the dissertation was added. A second item seeking participant perceptions of the strengths and limitations of the program delivery location and facility was also added. One additional question in the 2008 survey which asked why they decided to participate in the cohort program was revised to ask if they would recommend participating in a cohort to their closest friend.

Findings

Student perceptions regarding strengths and limitations of the cohort model from the 2011 survey were summarized and compared to the 2008 findings. This comparison of the two data sets is organized around the major concepts reflected in the survey instruments and a final section is focused on participant perceptions of their preparation to begin the dissertation. Nineteen of 20 students in the cohort responded to the 2008 survey. Eighteen of these 20 participants continued to be enrolled in the program at the time of the 2011 survey. Sixteen of the 18 continuing candidates responded to the May 2011 survey. The findings from the two surveys are presented and discussed in the following sections and are summarized in Figure 2.

Survey Item	*Strengths*		*Limitations*	
	2008 ←	→ **2011**	**2008** ←	→ **2011**
Model Applicability	Convenient location; rapid progress; employment/family friendly; known locally; pre-selected courses	Convenient location; rapid progress; expanded personally/professionally; employment/family friendly; learning structure/ organization; support system; close relationships among participants	No course choices	No course choices

(continued next page)

Survey Item	*Strengths*	*Limitations*	*Survey Item*	*Strengths*
	2008 ⟵ ⟶ 2011		2008 ⟵ ⟶ 2011	
Content/Instruction	Seminars; schedule; concentrated material in short time; fast pace; concern of instructors; timely feedback	Advanced level work; pre-ordered course sequence; meaningful work good faculty; C&I and Leadership mix; concurrent classes; well-rounded, focused, condensed, and most content relevant; most faculty caring	Adult learner needs not considered; schedule; time required for writing assignments; slow pace	Limited choice of courses; some courses irrelevant/redundant; faculty difficulty in adapting courses to cohort model; inadequate instructional methods; weekends tied up; pace too fast for some
Format/Delivery	Central location; convenient; lodging nearby; mixed delivery; monthly schedule; online format; pre-set schedule; security of knowing program plan	Alignment with personal goals and aspirations; hybrid delivery; scheduling; support; convenient; keeps students on track; flexibility without sacrificing rigor; good lodging; good shopping	Technology problems; need more statistics; need more face time; no flexibility	No flexibility in courses; no choice in professors or course sequence; Friday nights too short—some Saturdays too long; pairing of courses; pace grueling (but okay); facility conflicts; faculty travel; required overnight stay; missed face-to-face
Interaction with Faculty	Weekends great; responsive online; effort to know students as group and as individuals; faculty available; like to get to know professors during long class meetings; faculty comfortable with cohort students; frequent contact even when no longer enrolled in a course	Good with those who wanted to be there; seminars help; excellent faculty; opportunities to work with faculty outside of classroom; faculty supportive and personable; 1-hour introductory session good; willingness of several faculty to travel even if not teaching	Distance; communication; conferencing; limited; hard to establish meaningful relationship(s); don't know faculty well enough; do not interact with the broader doctoral faculty	Faculty travel; no contact with many faculty; relationships and role models limited; lack of time on campus; electronic communications; forced and contrived interaction (such as seminars); early committee and chair selection requirement a challenge
Interaction with Peers	Bonds; support; know each other well; networking; multiple perspectives; discussion boards and e-mails; "family"; strong rapport; support continues outside of the program	Encouraged interaction among students; strong support system; long-term bonds forged; professional network; developed teamwork	Travel distance; meeting frequency; communication online limits; lack of contact with traditional doctoral students; limited to perspectives of cohort group	Challenged "comfort zones" of interaction; sometimes too social; only interacted with non-cohort students at seminars; less chance to interact/meet with chair or committee; re: socialization–eventually "enough is enough"

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Survey Item	Strengths		Limitations	
	2008 ← → **2011**		**2008** ← → **2011**	
Support and Resources	Library staff helpful; plentiful online resources posted by faculty; total access; online tools; access only limited by individual proficiency; helpful office staff; accessible; great for communicating; faculty proficient/adept; meaningful tools; user friendly	Have to adapt; some faculty willing to travel to meet with students to do advising; some faculty made alternate resource lists available for online reference; excellent most of time; convenient (i.e. SKYPE); technology okay but not adequate at Braxton Middle School; MU OIT Help Desk was helpful; learned to use several different programs	Limited access; hard to schedule appointments for advising; being off-campus; inconvenient; online library difficult to navigate; individual proficiency; system failures; some faculty lack clarity in postings	Felt alienated from campus support services; difficult access if lived off campus or out of Charleston; advising was a weakness; seemed that online library site was continually changing; Blackboard was adequate for most courses
Portfolio Opportunities	Focus on peer collaboration; encouraged to write and research; project support; some chairs provide generous support and opportunities rapport and collegiality of cohort members and faculty; discussion board; student will find opportunities if communicating frequently with faculty	Numerous and varied opportunities; opportunities sent out on MU email; most faculty work hard to make this possible; opportunities limited only by the individual willing to seek	Limited face-to-face contact; time; direction; collaboration challenging; research facilities not readily available; limited opportunities for staff/student collaboration; distance between faculty and students for collaboration	Disadvantage if off-campus due to limited contact with peers or faculty; learning research took more personal study due to limited contact with faculty; student must approach faculty; more students than faculty available
Advisement/Guidance	Clear expectations and requirements; program structure; helpful faculty; tailored program; individual attention; well-informed; on task; generous advice	Constant reminders; strong and helpful; a few faculty especially helpful to anyone; if you paid attention you knew what was going on	Time; distance; stressful; hard to make appointments; limited faculty eligible to chair; pressure to select chair/committee; conflicting advice from faculty; limited contact with instructors prior to chair selection	Guidance a challenge due to limited interaction with large numbers of faculty; no info from other students who have gone through before; chair selection could have waited a couple of semesters; guidance affected by distance; a disadvantage if did not go through MU master's program

Figure 2. Summary of 2008 and 2011 Responses

Applicability of the Cohort Model

Ten of the 19 respondents in 2008 and seven of the 16 respondents in 2011 noted the applicability of the cohort model for fully employed professionals with family commitments as a major advantage of the model. Participants routinely referred to the ability to "… balance professional demands and academic demands…" as a positive characteristic of the model. One participant noted that the cohort model "… most likely was the easiest way to insert the pursuit of a doctoral degree into one's life.…" Interestingly, nine of the 2008 respondents and 12 of the respondents in the 2011 survey mentioned the relationships they had developed and the support that resulted from the

relationships as a positive outcome. The impact of the development of these relationships was reflected in participant comments such as "…I have learned content but also have developed relationships that have given me new perspectives on education…" and "…would recommend a doctoral cohort due to the relationships one develops…." One respondent noted that "…most of my closest friends are in the cohort.…" All 2011 respondents indicated they would recommend participating in a cohort to a close friend.

Program Content/Instruction

Responses from both the 2008 and 2011 surveys were generally supportive of the program content and instruction. Students noted the structure of the course schedule, the fast pace of the program, the mix of students in the courses, and the seminar as program strengths. The structured nature of the course offerings was considered as both a program strength and limitation in both surveys. The nature of this contradiction was reflected in participant comments such as the cohort offers "…less variety of courses…" but "…the structure keeps participants on track…", and "…choices were lacking…" but "…all students were taking the same classes.…"

Several limitations related to program content/ instruction were noted in the 2011 findings that were not noted in the 2008 study. Findings in the earlier survey suggested a lack of focus on adult learner needs, the weekend schedule, perceived slow pace, and time required for writing assignments as limitations. Findings from the 2011 survey revealed limitations related to reduced course choice, duplication in course content, faculty not fully committed to the cohort model, use of hybrid technology, faculty difficulty in modifying courses for cohort delivery, and the pace of the cohort as too fast for some participants. One participant noted that "…I liked not having to worry about course sequencing, registering, and instructors; however, it left me at the mercy of the program director." Another participant characterized the schedule and program focus as a strength, but felt the travel and having weekends tied up were limitations.

Program Format/Delivery

Participants were also asked to identify the strengths and limitations of the cohort format and delivery system. The strengths cited in the 2011 survey were similar to those noted in the initial survey. Participants liked the central location, hybrid delivery system, monthly schedule, and structured program. Students consistently expressed their appreciation for the hybrid

format with comments such as "…I especially liked the online format and monthly meetings…it worked well with my personal and professional needs.…"

Few limitations in format and delivery were noted in 2008; however, respondents identified several limitations in the 2011 survey. Limitations noted in 2008 included technology problems, the need for more face time, and the lack of flexibility. Additional limitations noted in 2011 included inadequate course sequencing, no choice in faculty, concerns with the Friday evening–all day Saturday schedule, and facilities that were not appropriate for adult learners and inadequately equipped to provide needed technology support. Concerns about course sequencing were manifested through comments such as "…in hind-sight, there were some courses that should have been offered earlier and some that should have been offered later in the program…" and "…I think we all learned that some courses just match better with some than others.…"

Interaction with Faculty

Both surveys included a question regarding participant opportunities to interact with faculty. Participants noted the responsiveness of faculty teaching the courses and their opportunities to work with faculty outside of the classroom and after courses were completed as strengths in both surveys. Interaction with faculty teaching in the cohort was routinely described as "…excellent…" and "…for the most part, positive and professional.…" The two annual seminars for all doctoral students and the one hour on-site introductory sessions were also noted as strengths in the 2011 survey.

Limitations noted related to faculty interaction were similar in both surveys. The distance to the site, limited face-to-face contact, and extensive reliance on electronic communication made getting to know faculty who were not actually teaching in the program a challenge. Several respondents identified with the concern about limited interaction with faculty not teaching in the program with comments such as faculty contact was "…limited due to distance and lack of time on campus…" and "…the off campus location limits contact with faculty other than course instructors…". The pressure to select a chair early in the program was enhanced as a result of the limited access to faculty not teaching in the program. One student noted "…I felt sorry for the people forced into choosing a chair so early…without having adequate opportunities to get to know a broader range of faculty.…" Another respondent noted the lack of interaction with faculty who do

not teach in the cohort "…can be a major challenge when it comes to committee or chair selection.…"

Interaction with Peers

Responses to both surveys were consistent in characterizing the interaction among cohort as a real strength of the cohort model. Respondents indicated that the cohort encouraged interaction among peers resulting in the development of many long-term personal and professional relationships. Several participants noted the sense of family that had developed and that the ensuing support extended beyond the confines of the cohort. One respondent captured the essence of the peer interaction in this manner: "…the cohort model allowed us to get to know each other and get comfortable thus allowing us to have a high level of relevant dialogue…more so than in a traditional setting…". Several respondents also alluded to the development of a "…professional network that will be valuable in the future…".

Limitations noted about peer interaction were essentially the same in both surveys. Respondents identified the travel distance, monthly meetings, and the reliance on online communication as challenges when interacting with peers. Both groups also perceived the limited interaction with doctoral students not involved in the cohort as a shortcoming of the cohort.

Support and Resources

Perceptions regarding the support and resources from both the 2008 and 2011 groups noted the library, resources provided by faculty, and the access to technology as strengths. Students did note that they had learned to use several different technologies such as Blackboard. Concurrently, respondents in both surveys noted issues with access to library and technology resources. In the 2011 survey, some respondents noted feeling alienated from campus support services as a result of being "off-campus."

Portfolio Opportunities

One of the major components of the Marshall University doctoral program is the development of a student portfolio which must include multiple scholarly works. Providing these opportunities in the cohort context was a challenge from the start. Students were asked to provide their assessment of this program element in both surveys.

Respondents cited similar strengths related to portfolio opportunities in both surveys. They noted a focus on peer collaboration and indicated that they were encouraged to get involved in projects. Students were consistently made aware of portfolio opportunities and there was a collegial climate that supported these projects. One student appeared to capture the general perception in this comment "…portfolio opportunities were only limited by the individual…if a person sought opportunities, they were available…".

In terms of limitations, students again identified the distance, limited face-to-face interaction, and direct access to only a portion of the faculty as challenges. Respondents to the 2011 survey also noted there were more students than faculty available, that students needed to be proactive and approach faculty, and that developing research proficiency required more individual study as a result of the limited faculty interaction. One participant characterized the model in this manner "…many opportunities – we students just had to express an interest and there usually was support from some faculty to get there…".

Advisement and Guidance

Program strengths cited across both surveys included the clearly stated expectations, program structure, generous advice, and constant email reminders. Again, distance, limited access to faculty, and being off-campus presented challenges in securing advice and guidance. One student emphasized the critical nature of the relationship between student and chair, commenting that "…knowing what is expected comes easy when you have good communication with your chair…". Limited access to non-cohort students, especially those who were further along or had completed the program, was also perceived as a limitation. In addition, not having completed a master's program at Marshall was noted as a limitation as participants perceived prior experience with the institution and faculty as an advantage.

Dissertation Preparation

Participants acknowledged that the completion of a dissertation would probably be more extensive and demanding than they had realized. Respondents appeared to understand the role of the chair and committee in the process and believed that the portfolio projects in which they had participated had given them a "small-scale" glimpse of what the process would entail. These statements of confidence notwithstanding, respondents also expressed apprehension about the research process they were ready to begin. One respondent noted "…it's a whole different ballgame as it is now the application of what you have learned…".

Discussion

The findings of this study indicate that the convenience of the cohort model is important and is a major reason individuals participate. They also suggest that the relationships that develop and the support that is provided may be the key variables influencing retention and completion. Program administrators must acknowledge and support the development of these relationships.

There are inherent pros and cons in the cohort model. For example, cohorts usually provide few options in terms of course selection; however, candidates know their complete plan of study at the outset, when it will be provided, and how. Students generally know the instructors for specific courses well in advance; however, they have no alternative if for some reason they prefer a different instructor. Students are consistently positive about the monthly meeting schedule while they concurrently express a desire for more face to face time. The sense of family that develops in a cohort is sometimes at odds with the limited interaction with students outside the cohort. Students sometimes feel a sense of urgency to identify a committee chair and select committee members, but cite limited opportunities to interact with faculty not directly teaching in the cohort as one of the limitations of the cohort model.

Strong relationships develop among cohort students and between students and faculty teaching in the cohort. Interaction with other faculty who are not teaching cohort courses must be formally planned and orchestrated. The cohort model appears to be very effective in developing a strong sense of cohesiveness for participants. This inward focus can be somewhat limiting over the life of the program. Cohort administrators must develop formal mechanisms to ensure that cohort students have on-going opportunities to interact with non-cohort doctoral students.

The potential impact of a cohort program on the traditional/on-campus program must not be underestimated. Many of the curriculum revisions and refinements, instructional models and materials, and innovative assessments that are developed in response to the reduced face-to-face access inherent in the cohort model, may also have significant implications for the traditional on-campus program.

Guidelines/Recommendations

Based on findings from the 2008 survey and our review of the literature, we provided a set of guidelines/recommendations for consideration by other institutions considering the development of doctoral cohorts (Tuckwiller & Childress, 2009). In general, our findings from the 2011 survey reinforced the importance of these initial guidelines. These guidelines notwithstanding, our analysis of the data from the 2011 survey suggested several additional /recommendations to be considered when developing cohort doctoral programs. The recommendations/guidelines emerging from these two surveys have been organized into three broad themes: Structure and Logistics, Design and Delivery, and Communication and Relationships. These guidelines/recommendations are provided in Figure 3.

Application of Study Findings

Based on the success of this initial cohort, the GSEPD started a new cohort in the fall 2011. A number of changes were made in the planning and development of this second cohort, many of these emerging from the findings from the 2008 and 2011 surveys. These changes are summarized below.

- Moved from a Friday evening–Saturday to an all day Saturday delivery format.
- Increased the number of face-to-face meeting days to 14.
- Relocated the site of the face-to-face meetings to Marshall's South Charleston campus.
- Revised course sequencing to provide better pacing for more challenging courses.
- Changed course pairings on a semester basis to facilitate more integration across courses.
- Increased the time and support available for chair and committee selection.
- Provided additional options for course selection.
- Provided improved facilities and technology access/support.

Recommendations for Further Research

In our 2009 article, we identified several topics for which additional research would be beneficial to program administrators and faculty as they developed and implemented doctoral programs using a cohort model. The following list of suggested topics for further research incorporates the suggestions from the 2008 survey as well as the new areas which were identified.

Theme	Guidelines/Recommendations
Structure and Logistics	• Attend closely to physical characteristics of the setting (e.g. classroom environment, access to overnight accommodations, travel access, etc.). • Use the concepts of convenience, reduced travel costs, and flexible scheduling as key points in marketing and recruiting efforts. • Ensure that the necessary support and resources (e.g. technology, library access, advising, etc.) are available and operating effectively.
Design and Delivery	• Consider carefully which courses to begin with, courses available each semester, the feasibility of providing electives, and the nature of the course content. • Encourage faculty commitment to full participation in the cohort. Their non-teaching functions (e.g. advising, facilitating/directing portfolio projects, chairing and serving on committees, etc.) are as critical as their role in direct instruction. • Incorporate effective adult learning techniques in the instructional process. • Anticipate the need to adjust course organization and delivery strategies. • Consider the effect on faculty involved in a cohort program. Course content and sequencing must be adapted to the cohort schedule, instructional strategies modified for face-to-face meetings and hybrid delivery, and assessments modified accordingly. • Use caution in involving faculty who are not full-time faculty to teach in the cohort. It is often impossible for part-time faculty to be fully involved and committed to the program and adequately prepared to provide the non-instructional support that is so critical to program success.
Communication and Relationships	• Facilitate the interaction of cohort participants with faculty other than those teaching in the program. • Provide opportunities for students to have on-campus interaction. • Develop strategies to continuously interact/communicate with cohort participants. • Provide formal assistance with the selection of committee chairs and members. • Acknowledge the potential for the development of a "second class" mentality or alienation mind-set within the cohort.

Figure 3. Guidelines/Recommendations for Developing Doctoral Cohorts

• Assess student feedback annually.
• Compare cohort and non-cohort doctoral student performance.
• Compare faculty perceptions of instructional experiences in cohort and non-cohort doctoral programs.
• Examine differences in institutional marketing and program visibility between cohort and non-cohort doctoral programs.
• Compare retention in cohort and non-cohort programs to determine the extent to which they differ and why.
• Examine the effect of cohort participation on faculty planning, course development, and instruction.

Concluding Remarks

In conclusion, there is no question that the use of the cohort model as the delivery vehicle for doctoral programs in education is increasing. Based on our study findings and review of the related literature, the strengths of the cohort approach appear to far outweigh any limitations that have been identified. In fact, a number of higher education institutions have abandoned their traditional program delivery models and are only offering doctoral education programs through a cohort format. Nevertheless, much of what is known about the impact of the cohort model in doctoral education program delivery is based on anecdotal, case studies, and perceptual data. As program developers and leaders, we must commit ourselves to developing more rigorous evaluations of both the process and impact of the cohort model in the delivery

of doctoral programs in education. Doing so will expand the knowledge base and our understanding of the value of this model and its limitations.

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Higher Education and the Public Good

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Abstract

The purpose of this qualitative case study was to examine perceptions of state legislators regarding funding of public higher education in Missouri. The study sought to determine how Missouri legislators perceive the purpose of higher education and the role the state government should play in funding it. The concept that higher education is a public good framed this study, meaning that it benefits more than just those individuals who receive it or results in unintended positive outcomes for a larger population than just its consumers. The data was gathered through semi-structured interviews with 28 legislators. Data analysis, using constant comparative methods, uncovered how legislators perceive the priority of higher education in Missouri, and their view of higher education as a public good versus a private good. The findings suggest several implications for policy and practice. While Missouri's legislators see education as a priority, it remains critical for higher education administrators to continue to keep the public functions served by higher education at the forefront in conversations with legislators and other state citizens.

Background

Higher education is generally considered a public good, benefiting more than simply those who attain degrees (Ehrenberg, 2006; Heller, 2001; Kezar, Chambers, & Burkhardt, 2005; Longanecker, 2005; Reindl & Brower, 2001). Those who obtain degrees and join the workforce aid in the state's economic development (Trostel, 2009). In addition to producing workers for a knowledge economy, public higher education also promotes citizenship and cultural development among its participants. These graduates bring such ideas into their jobs, neighborhoods, and private lives, sharing ideas with others for the benefit of all (Baum, Ma, & Payea, 2010; Ehrenberg, 2006; Longanecker, 2005; Rizzo, 2004).

Although higher education provides benefits to all residents of the state, legislators in recent years have tended to view it as a private good (Baer, 2005; Malveaux, 2003; Selingo, 2003; Vedder, 2004; Weerts & Ronca, 2006). The view that those who matriculate at institutions of higher education are the only ones who benefit from it (Baer, 2005; Longanecker, 2005; Mumper, 2001; Reindl & Brower, 2001; Selingo, 2003; Vedder, 2004) may have contributed to funding shifts to other areas viewed as serving the public good, such as public health, public safety, and public education (Alexander & Layzell, 2006; Baer, 2005; Cheslock & Gianneschi, 2008; Delaney & Doyle, 2007; Ehrenberg, 2006; Higdon, 2003; Jacoby & Schneider, 2001; Kane et al., 2003; Longanecker, 2006; Okunade, 2004; Reindl & Brower, 2001; Rizzo, 2006; Selingo, 2003; Vedder, 2004; Zumeta, 2001). This trend also stems in part from the fact that higher education is viewed as having the opportunity to supplement state funds through tuition and fees paid by students, who are its primary beneficiaries (Ruppert, as cited in Mumper, 2001; Tannock, 2006; Vedder, 2004).

The purpose of this study was to examine the perceptions of Missouri's legislators concerning the funding of higher education in the state and to identify the factors that might influence those perceptions. The researcher also sought to explore if dedicated funding sources from state appropriations in Missouri had been established for other public goods, such as parks, prisons, and public P-12 education, but not for public higher education.

Conceptual Framework and Related Literature

This literature review is focused around the premise that higher education is a public good. It also presents studies regarding legislator perceptions of higher education and state funding conducted in Missouri, Colorado, and Indiana. These were the only other studies I found that had investigated legislator perceptions of state funding, which was a focus of this study.

Higher Education as a Public Good

In terms of economics, public goods are those "which simultaneously provide benefits to more than one individual…or…exhibit 'non-rivalry' in consumption" (Robson, 2007, p. 39; Paulsen, 2001). In other words, one person's use of the good does not completely consume it or prevent others from using it. Vedder (2004) notes that "the population that enjoys a public good does not increase the 'cost' at the margin of

maintaining it" (p. 129). Viewing higher education as a public good, therefore, means it benefits more than just those who receive it or results in unintended positive outcomes for a larger population than solely the consumers of public higher education (Ehrenberg, 2006; Heller, 2001; Kezar, Chambers, & Burkhardt, 2005; Koshal & Koshal, 2000; Reindl & Brower, 2001).

A broader view of the public good describes it as anything that improves the lives of people and the society as a whole (Longanecker, 2005) or "provides social benefits to the public at large" (Koshal & Koshal, 2000, p. 82). Higher education provides opportunities for training, research, and economic development (Kezar et al., 2005), including traditional courses and extended and continuing education opportunities. While these are certainly private goods, as they benefit those taking the courses and learning from them, they also function as public goods. For example, community members attend athletic and cultural events (Ehrenberg, 2000; Rizzo, 2004) on college campuses and can be exposed to history, customs, and artistic, cultural, and scientific knowledge (Vedder, 2004).

Campus facilities often host high school athletic events; plays, concerts, and other activities related to the arts are usually open to the public; and many campuses house museums or other facilities that provide access to these types of knowledge and information. Access to these types of activities also provides opportunities for increased involvement of parents in the educational experiences of their children (Malveaux, 2003). Higher education provides opportunities for civic engagement and political involvement (Courant, McPherson, & Resch, 2006; Curris, 2006; Malveaux, 2003; Paulsen, 2001; Rizzo, 2004) since campuses often host activities such as political rallies or debates that welcome all members of the community. Community members also benefit from enjoyment of "campus facilities (coffee shops, arboretum, gymnasia, etc.)" (Rizzo, 2004, p. 5).

There are larger benefits resulting from higher education, including increased "social and economic mobility" (Malveaux, 2003, p. 2) and "adaptability to change" (Paulsen, 2001, p. 99), as well as improved health for self and family (McMahon, 2009). Others discuss positive effect of higher education in such areas as "children's schooling [and] cognitive development" (McMahon, 2009, p. 18), volunteerism and charitable giving (Courant et al., 2006; Malveaux, 2003; McMahon, 2009; Paulsen, 2001; Rizzo, 2004), greater involvement in civic organizations and political processes

(McMahon, 2009), and increased understanding of and regard for diversity (Paulsen & Toutkoushian, 2006). Increased utilization of higher education results in reduced unemployment and crime rates, prison costs, and welfare and Medicaid utilization (Baum et al., 2010; Courant et al., 2006; McMahon, 2009; Paulsen, 2001); greater "happiness [and] longevity" (McMahon, 2009, p. 18); and even increases in property values and revenues at community businesses (Ehrenberg, 2000). All of the residents of a community or state benefit from these positive externalities. These positive externalities can benefit not only the current generation, but even "generations still unborn" (McMahon, p. 194).

Although there appears to be a general acceptance of higher education as a public good, there are those who question this perception. Tannock (2006) acknowledges increases in wages for higher education graduates, but wonders if discussions of other elements of the public good are not simply for show on the part of universities. Some critics intimate that public good functions are limited to such things as serving as a screening mechanism for employers (Vedder, 2004), while some believe higher education increases inequalities in the areas of "[s]tatus, power, voice, [and] opportunities" (Tannock, 2006, p. 50). The view that higher education is a private good has led some to question why those who participate do not solely fund it, with no involvement by the state (Vedder, 2004).

Legislator Perceptions
Skinner (2010) used survey research to explore the perceptions of legislators in the State of Missouri toward public higher education, highlighting the need to study legislator perceptions because of the "connection between Missouri State (sic.) appropriations and higher education funding levels and tuition" (p. 5). Studies conducted in other states informed Skinner's study (Dinnen, 1995; Perryman, 1993; Skinner, 2010). Perryman's study surveyed legislators about their perceptions of higher education in Colorado. In 1995, Dinnen modified Perryman's survey and conducted a similar study with legislators in Indiana. Skinner's 2010 survey of Missouri legislators was modeled on these previous two studies.

Due to the fact that Skinner (2010), Dinnen (1995), and Perryman (1993) conducted studies in different states (Missouri, Indiana, and Colorado, respectively), one might not expect their results to be completely transferable. A review of similarities and differences in the findings, however, may help us understand elements of the bigger picture regarding legislator perceptions

regarding higher education funding. For example, Perryman's (1993) study found no significant differences in legislator perceptions based on age, gender, or length of service; Skinner's (2010) results indicated that women, younger legislators, and those with less than 4 or more than 12 years of service tended to be more supportive of state funding for public higher education. Perceptions based on educational level were mixed in Skinner's (2010) study, while Perryman (1993) and Dinnen (1995) reported no significant differences on this variable.

Interestingly, in answering prompts based on specific variables related to different funding scenarios, legislators in Missouri (Skinner, 2010) and Indiana (Dinnen, 1995) responded similarly. Legislators in both states either strongly agreed (Skinner, 2010) or agreed more than disagreed (Dinnen, 1995) that state appropriations should account for a larger percentage of higher education funding than should tuition. In both studies, legislators agreed more than disagreed that more funding should be allocated to institutions of higher education who worked to improve relationships with and the transition from P-12 schools, that tuition should be linked to the condition of the general or state economy, and that students in high-cost programs should pay a larger share of tuition than students in low-cost programs (Dinnen, 1995; Skinner, 2010). Legislators in both states also strongly disagreed (Skinner, 2010) or disagreed more than agreed (Dinnen, 1995) that funding should be tied to the graduation rates of traditionally underrepresented students.

Skinner (2010) focused on "principal-agent, social capital, and educational environment theories" (p. 2) as the theoretical framework for his study. He used funding variables from the Perryman (1993) and Dinnen (1995) studies to try to assess legislator perceptions about the funding of public higher education. While many of the variables looked at funding aspects that are not the focus of this study (e.g., tying student funding to financial aid, institutional mission, cooperation with P-12 schools, enrollment, graduation rates, underserved student populations), several of the variables are closely tied to the idea of higher education as a public good and the need for a dedicated funding source for public higher education in the State of Missouri (Skinner, 2010).

The findings from Skinner's study (2010) that were of primary interest with regard to the present study included those seeking information concerning legislator perceptions regarding proportions of funding

to institutions of higher education coming from state appropriations rather than tuition and fees; student share of the cost of public higher education; funding proportions for public goods receiving state appropriations; funding for P-12 education versus higher education; and perceptions regarding funding as related to the accountability of institutions of higher education. Reviewing the findings from his study helped me think about what sorts of questions to ask Missouri legislators.

With regard to the findings from the study, Skinner (2010) noted that legislators in Missouri "tended to agree more than disagree that the needs of Missouri infrastructure, elderly, healthcare, and prisons should receive funding priority over public higher education" (p. 204) and "tended to strongly agree that the needs of Missouri's PK-12 educational system should receive funding priority over public higher education" (p. 205). These beliefs regarding competition for resources on the part of legislators may have informed and influenced their funding decisions. Additionally, Skinner found that legislators in the State of Missouri "tended to agree more than disagree that increases in tuition are closely related to poor management of higher education costs, and not changes in state appropriations" (p. 203) and "tended to disagree more than agree that increases in tuition are closely related to decreases in state appropriations and not the actions of higher education administrators" (p. 202). These perceptions regarding accountability may have also had an impact on their funding decisions regarding public higher education in recent years. Skinner also found that Missouri legislators "tended to strongly agree that state appropriations to public higher education should exceed the level of financial support to colleges and universities provided by student tuition and fees" (p. 204).

Based on the findings from Skinner (2010), it seems Missouri's legislators believe that state appropriations for public higher education should outpace revenue from tuition and fees, which would indicate a belief that public higher education is a public good deserving of public funds. However, the findings regarding funding of other goods seem to indicate that public higher education might be low on the list of public goods to be funded, a trend noted nationally over a decade ago by Hossler et al. (1997). Finally, the view of Missouri legislators that increases in tuition stem more from poor decision-making on the part of administrators in public institutions of higher education rather than from decreases in appropriations warrants further study,

especially in light of the ideas of Hovey's (1999) balance wheel and the notion of competition for resources.

Research Design

Research Design

I am a faculty member at a public 4-year university in the State of Missouri, and have worked at this institution for more than a decade. As such, I had a deep personal interest in learning more about the funding of public higher education in general, and about the funding of public higher education in the State of Missouri in particular. My desire "to gain an in-depth understanding of the situation and meaning for those involved" (Merriam, 1998, p. 19) led me to conduct an instrumental case study focusing on the issue of higher education funding using the specific case of the State of Missouri (Creswell, 2007; Stake, 1995). My desire to learn more about the perceptions and processes involved in funding public higher education in Missouri led me to take a comprehensive look at this particular instance, providing "*rich, thick description*" (Creswell, 2003, p. 196, emphasis in original) of the case being studied.

Participants

The decision to pursue a case study design made the selection of a purposeful sample (Merriam, 1998) the best choice for this study. I selected key current and past legislative committee members to interview. The committees most central to the current study include the Missouri Senate Appropriations Committee, the Missouri Senate Education Committee, the Missouri House of Representatives Appropriations Committee (Education), the Missouri House of Representatives Budget Committee, the Missouri House of Representatives Higher Education Committee, and the Joint Committee on Education (Missouri House of Representatives, 2010; Missouri Senate, Standing Committees, n.d.; Missouri Senate, Statutory Committees, n.d.).

Data Sources and Data Collection Procedures

Potential participants consisted of all members of the identified committees from the 95th General Assembly. Some of the identified legislators served on more than one committee; after removing duplicate names, 63 legislators remained (47 representatives and 16 senators). A letter of invitation explaining the purpose of my study and why they had been selected was sent to each member of the population.

Of those identified as eligible to participate, 28 people agreed to participate and completed interviews for my study. Of these 28, I conducted 14 interviews by phone, 13 in person, and one participant asked that I e-mail the questions so they could be answered in written format. Four participants had reached the end of their term limits at the end of the 95th General Assembly, but still agreed to speak with me for this study.

A "questioning route" (Krueger & Casey, 2000, p. 12), or semi-structured list of questions designed to focus the interviews and maintain consistency in my questioning was used. These questions were followed up with prompts or changed directions if information elicited from participants led the interviews in unplanned but relevant directions. Except for the emailed response, all interviews were digitally recorded each interview with the participants' consent. Notes of participants' answers and personal field notes were also taken during each interview. Interviews were transcribed verbatim by the researcher as soon as possible, a practice recommended by Emerson, Fretz, and Shaw (1995) regarding field notes.

Data Analysis

I practiced categorical aggregation (Creswell, 2007; Stake, 1995) in analyzing my data. I placed the data into a transcription grid which helped me identify themes using the "constant comparative method of data analysis" (Merriam, 1998, p. 159), I became aware of key words, phrases, and ideas as I transcribed and reviewed data, particularly through the use of the grid. I then searched the other transcripts for mention of the same or similar concepts. This idea of searching for patterns is also discussed by Creswell (2007) and Stake (1995). These patterns became the general categories or themes I used to analyze, aggregate, and discuss these concepts and data.

Referring to a case study conducted by Asmussen and Creswell in 1995, Creswell (2007) described the process by which they collected data, used categorical aggregation to "aggregate the data into about 20 categories…and collapse them into five themes" (p. 164). While I used the same general principles, I reversed their process. Themes emerged from participants' comments. Some were mentioned by a large majority of participants; others by just a few. Additionally, some themes were identified by me, and some were identified in vivo from the participants.

Trustworthiness

I used triangulation (Merriam, 1998) to compare data from different sources to ensure that no single source was used too heavily or trusted implicitly without

comparison to information from other sources. Member checking (Merriam, 1998) was also incorporated; interview participants were sent copies of interview transcripts and given the opportunity to correct or clarify any information contained in the transcripts before their use in the study. I also attempted to use "*rich, thick description*" (Creswell, 2003, p. 196, emphasis in original) in my narrative to help readers understand the perspectives of the participants in this case.

Methodological Limitations of the Study

In choosing a case study design, I bounded my study with some immediate limitations. Case studies by their very nature seek to learn and understand more about a particular situation (Merriam, 1998). In this case, my findings might not be relevant to state funding of other initiatives within the State of Missouri, or to the funding of public higher education in other states. Those who review my study will decide for themselves if my findings will be relevant to their individual situations.

This study was limited to the State of Missouri. While this may limit transferability, similar studies conducted by Perryman (1993) in Colorado and Dinnen (1995) in Indiana lend credence to the containment of a case study to a single state. Additionally, the study is somewhat limited by the timeframe in which it was conducted. The study involved members of the 95th General Assembly for the State of Missouri; due to elections held in November 2010 and the convening of the 96th General Assembly in January 2011, access to some key participants may have been affected by

personnel changes in the legislature due to election results.

The fact that I am an employee of a public higher education institution in the State of Missouri may have been a limitation. I believe my positionality assisted my study in many ways (e.g., more than a decade of experience working in higher education administration, familiarity with past state funding at my institution), but I recognize that this history could have led to biases that could have influenced my interpretation of the data. In particular, my assumption that higher education is a public good may have influenced me as I reviewed participants' comments. My belief in the public good aspects of higher education may have colored my interpretation of their statements as I conducted my analysis of data. I engaged in active reflection throughout the process, with the hope that I was able to recognize, identify, and mitigate any biases I saw in myself.

Because I assured confidentiality to my participants, I will not refer to them by name and I will not reveal identifying characteristics about them. However, to be able to quote or refer to a particular participant as needed, I have assigned all participants pseudonyms. Table 1 identifies the pseudonyms for each participant, and encapsulates the demographic characteristics for the participants in this study, to highlight the fact that the proportions of study participants closely mirror those of the full 95th General Assembly in terms of composition regarding branch of legislature, sex, political party, and ethnicity.

Table 1
Participant Characteristics

Pseudonym	Branch	Sex	Party	Ethnicity
Alex	House	Male	Republican	Caucasian
Brent	Senate	Male	Democrat	Caucasian
Alissa	House	Female	Democrat	Caucasian
Caleb	Senate	Male	Republican	Caucasian
Brooke	House	Female	Democrat	Caucasian
Camille	Senate	Female	Republican	Caucasian
Dana	Senate	Female	Democrat	African-American
Daniel	Senate	Male	Republican	Caucasian
Elizabeth	House	Female	Democrat	Caucasian
Evan	House	Female	Republican	Caucasian

(table continues)

Table 1 (continued)

Pseudonym	Branch	Sex	Party	Ethnicity
Frank	House	Female	Democrat	Caucasian
Gary	House	Female	Republican	Caucasian
Henry	House	Male	Democrat	Caucasian
Fiona	Senate	Female	Democrat	Caucasian
Ian	Senate	Male	Republican	Caucasian
Jeff	Senate	Male	Republican	Caucasian
Kent	Senate	Male	Democrat	Caucasian
Luke	House	Male	Democrat	African-American
Matt	House	Male	Republican	Caucasian
Neil	House	Male	Republican	Caucasian
Owen	House	Male	Democrat	Caucasian
Paul	House	Male	Republican	Caucasian
Quentin	Senate	Male	Republican	Caucasian
Gail	House	Female	Democrat	Caucasian
Richard	House	Male	Democrat	Caucasian
Shane	House	Male	Republican	Caucasian
Hannah	House	Female	Democrat	Caucasian
Tom	Senate	Male	Republican	Caucasian

Findings

Two main themes emerged from the interview data relating to the concept of higher education as a public good: the priority of higher education in Missouri and the question of private good versus public good. In presenting the findings, I include quotes from participants as exemplars as empirical evidence supporting the theme. The themes were particularly robust in that party affiliation, legislative branch, or other demographic characteristics did not result in counter-narratives, unless otherwise noted.

The Priority of Higher Education in Missouri

An easy target. More than half of the participants said that their ability to prioritize higher education was dependent primarily upon the availability of funds. Several mentioned that the only reason they would ever reduce funding for higher education would be due to "a reduction in revenues" or a "tight financial situation."

Several participants discussed the need for increased revenues in the state, and the need to explore ways to create or enhance revenue streams; however, many also noted the reluctance of the current Republican-led legislature to raise taxes. Dana, Hannah, and Elizabeth, all members of the Democratic party, had the most to say about this topic; this was the only instance in the study where there was a clear partisan distinction in participant responses. Dana and Hannah both noted that Missouri does not currently assess taxes on Internet sales; they also noted that increasing the cigarette tax – what Dana called the "sin tax" – would be a way to increase revenue since Missouri's cigarette excise tax rate is currently the lowest in the nation[1]. Dana said, "those are things that we could readily utilize to increase our funding, and, of course, higher education would be part of that funding cycle."

A scalpel, or an ax? Several legislators mentioned that they look at a program's or institution's efficiency or effectiveness when prioritizing funding decisions. Some mentioned this as a criterion for reducing or eliminating programs, while others mentioned accountability in terms of the management of state funds. One stated that funding decisions should be based on merit. Fiona described the need to choose the right tool when making budget cuts:

> Sometimes with shortfalls, everybody gets the same whack in some areas, but it's done more with a scalpel than with an ax, because sometimes when you cut, there's nothing left in a program, and if you want the program, you've got to not be as brutal with it. Sometimes it works better just to cut out entire programs and then spread the cuts in varying degrees elsewhere.

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[1] See also National Conference of State Legislators, 2011.

Mike expressed that some institutions just saw it as "a matter of how much money can we obtain from the state, or federal, or grants, rather than how can we make this program the most efficient?" Some participants extended the concept of efficiency beyond programs to personnel and facilities, as well. Daniel said he believed that legislators are "expecting the departments to do more with less" and to "acknowledge through what they do with their budgets that we're in a very tough time right now." He went on to say that what he would "want to see is probably salary freezes, hiring freezes – those types of things" and that what "you don't want to see is fat raises for professors and otherwise." He also spoke of a hope that colleges and universities would identify "other efficiencies" and gave examples of degree programs with low enrollments that could be eliminated if they were offered elsewhere.

Matt expressed a general feeling that recipients of state funds are not necessarily as conscientious about how they spend the money as they ought to be, because they "just [send] the bill on to somebody else to have it paid." He expressed a specific concern about underutilization of facilities, saying, "I know there are certain days, like on a Friday afternoon, that in some of those classroom buildings you can shoot a cannon down the hallway and never hit anybody." Shane suggested investigating ways to "operate on a smaller level with less money…[t]hink about ways that you can provide a better product at a lower price."

Needs versus wants. In terms of priorities, Dana stated that when determining which departments should get more or less money, "you go through, and you kind of weigh out what seems to be a priority, what seems to be a need, rather than a want." Quentin spoke of a need to "list what your priorities are, what things that you feel are important to the citizens of Missouri" after the Constitutional mandates have been settled. Tom also expressed a "firm [belief] in having those institutions come in and justify their budget and providing them a budget based on what they can prove that they need."

Others discussed the need to be able to fund facilities maintenance and capital improvements, and a concern that there is "a lot of infrastructure that's aging and crumbling because we simply haven't put the money into it," as Tom put it. In addition to the need to maintain existing facilities, some spoke of the need to be able to fund new construction, both in terms of residence halls and classroom facilities, to assist with

recruitment, to allow for expansion of general enrollments, and to meet accreditation requirements of high-need programs.

Participants also discussed the need for funding to attract and retain high-quality faculty and staff. Some mentioned concerns that faculty in the State of Missouri are "the lowest paid in the AAU [Association of American Universities]" or that "the level of our professors' pay is sort of mid-range," and that this could affect our ability to retain talent. As Tom mentioned, lower levels of pay can be tolerated in the short term, "but over time…the market actually works, and people are going to go other places."

Finally, participants indicated a need to provide funding to allow for growth and expansion in terms of programs and enrollments. Specifically, Alex and Richard noted the importance of funding to ensure that Missouri's public institutions of higher education remain competitive "with other states and other institutions," and also with "private institutions."

Institutional autonomy. In discussing funding of higher education, several legislators commented that their involvement in the spending of higher education dollars should end with the appropriation of the money. One commented that the legislature should review the requests of the institutions and make the funding determinations, but then give the institutions "more autonomy to make decisions on their own." Another shared that they "do allow quite a bit of deference to really who are the experts in the field, and those would be the people that actually operate the institutions, when they come in and make their case to us." About one-third of participants expressed that they felt a responsibility to be good stewards of taxpayers' money, and they expect institutions of higher education to act responsibly with the money they receive from the taxpayers. A couple of participants mentioned that when they make funding decisions, they want to make sure that taxpayers are getting the most or "biggest bang for their buck." Matt stated that when he appropriates taxpayers' money, he wants to make sure they will be getting a good "return on investment." Shane said his personal finance habits carry over to the legislature: "I don't like to spend my money, I don't like to spend your money."

Competing goods and conflicting priorities. Lastly, many legislators spoke of the competition for resources and the difficulty of prioritizing funding determinations between a variety of positive choices. Caleb called them

"conflicting priorities" and noted that "almost all of the requests are valid, they are necessary – there is just never enough money to go around to meet our needs, and so that's when we have to make the very, very tough decisions that we do."

The Question of Private Good Versus Public Good

In terms of looking at higher education as a public good, legislators' comments reflected that higher education serves as both a private good and a public good, and that trying to separate its private and public functions is not always easy. The concepts are nearly impossibly intertwined. Participants' comments reflect interconnection and indicated that these concepts are impossibly intertwined in that they sometimes would use a traditional public good example while discussing private benefits of higher education, and vice versa.

In terms of the financial impact on individuals, legislators mainly spoke to two factors: jobs, and increased personal income. Nearly half of participants mentioned jobs as a way that higher education benefits individuals. Some talked about higher education preparing people for positions that require more than a high school diploma or "that need specialized training." Others spoke in terms of helping prepare people to "adapt to the changing marketplace" or providing opportunities for "retraining, when people lose their jobs." Evan went so far as to say that he believed that "[i]f people didn't have to work, I'm not sure there would be a real high demand for higher education."

Several legislators also expressed the belief that higher education leads to increased personal income. Dana noted that higher education can "lift the economic level of people;" Kent phrased it as giving people a "mechanism where people can get a step up…[so] they can earn their way to a more stable economic environment."

In terms of financial impact for the state, most comments linked the need for an educated citizenry and economic development. Many legislators stated that when businesses are making the decision as to whether or not they want to locate in Missouri, they look to see if we have a "highly-qualified and educated workforce" in place.

Beyond financial impact, several participants discussed what they viewed as other benefits for individuals because of higher education. One topic mentioned by participants was having an educated citizenry.

Comments on this topic included that educated citizens tend to have "a higher standard of living," are more involved in the democratic process, end up being "more successful in life," and "[know] how to learn things and…how appreciate things more." As Ian put it, "the more educated your workforce is, you tend to have a higher quality, a standard, higher health rates, higher incomes, lower poverty, and things of that nature."

Legislators also mentioned personal enrichment as a benefit of higher education. Some spoke in broad terms, using phrases like "personal development" and "personal well-being." Others talked about life-long learning and "expanding your horizons." Some indicated specifically that they were not speaking about jobs or income. Shane said, "I'm not talking about money here, I'm talking about what their talents are, and what their abilities are, and what they can do." Alissa shared, "I think there is more than an economic benefit, there is a great benefit to having a satisfied and happy population that can read books, that can appreciate music, that can enjoy art, that can be creative."

Improved quality of life was also mentioned as a way that higher education benefits individuals. Some of the items that came up were tied to the financial benefits mentioned earlier, but some of the items mentioned were also positive externalities resulting from higher education. Several participants discussed the impact that higher education can have on the engagement level of citizens with the political process, noting that people who have degrees "tend to be better citizens and more informed citizens and more engaged citizens." Others said having citizens with higher education degrees affects quality of life in that "you see less crime" and "more property value."

Legislators also described some of the same issues identified as individual benefits of higher education when they discussed how higher education benefits the state. The positive externalities regarding quality of life, such as citizens engaged in voting, decreased crime rates, increased property values, their children's performance in school, and better health, were also mentioned as benefits to the state as a whole. Other quality of life issues relating to higher education that are of interest to the state include the fact that, as Alissa mentioned, "People like to move in a place that has nice theater, nice art, nice recreational opportunities." Caleb echoed this sentiment, saying, "That's where people want to be – around colleges – because it's just such a rich diversity and such a nice intellectual place that

people want to gravitate toward it." Legislators also observed the tendency of students to stay, live, and get jobs near where they went to school, and stated, "there's been a need to increase funding so that we have a greater number of professionals living and working in our state." Some also commented that having students remain in the state after graduation and earning higher income levels helps the state through increased revenues through such streams as incomes taxes, property taxes, sales taxes, and personal property taxes.

Discussion
Views of Public Higher Education

With regard to the question of how Missouri legislators view public higher education in the state, participants indicated a generally favorable view. The majority spoke positively with regard to the statewide system, individual public institutions, the overall environment of public higher education, and accessibility. Comments about the leadership at Missouri's public colleges and universities were largely complimentary, indicating that legislators do not withhold funding from higher education because of a belief that funds are mismanaged. Participants posited somewhat differing beliefs regarding the amount of autonomy institutions should have related to the funds they receive from the state, but did not express concerns regarding malfeasance.

Legislators clearly consider education a priority in Missouri; many commented that they would want to fund both K-12 education (even if there were not Constitutional provisions for it) and higher education. They believed higher education should receive as high a priority as K-12 education. It seemed that the lack of a Constitutional provision, limited availability of funds, and conflicting priorities were chief among the reasons that legislators could not fund higher education at the levels at which they would like to do so.

Legislator Perceptions of Higher Education as a Public Good

While none of the legislators specifically used the phrase "public good" to describe public higher education in the State of Missouri, some of their comments touched on the fact that they view it at least in part as a public good, or see that it has positive externalities. They generally mentioned these aspects when discussing how higher education affects the quality of life in the state. Participants acknowledged some of the private benefits, such as higher income levels and better jobs for college graduates. Many comments about the benefits of higher education were

also consistent with the research regarding public goods, such as voting practices (McMahon, 2009); how successful college graduates' children are in school (McMahon, 2009); lower crime rates and lower poverty (Baum, et al., 2010; Courant, et al., 2006; McMahon, 2009; Paulsen, 2001); higher health rates (McMahon, 2009); and increased property values and more professionals living and working in the state (Ehrenberg, 2000).

Participants identified that higher education leads to people generally being happier, more successful, and achieving goals, which are social benefits from higher education also noted by McMahon (2009). While there are private elements to these benefits, there are many spillover effects from these private goods that benefit the larger society. These include such things as contributions of higher education to the overall body of knowledge available to everyone (Kezar et al., 2005) and the tendency for wages to be higher for *all* workers in locations with large numbers of college graduates, not just those who hold the degrees (Groen & White, 2003; Rizzo, 2004).

Based upon data from this study and my own experiences working in higher education, I am concerned that Missouri's citizens do not fully understand the concept of the public good and the benefits that higher education can provide to all residents of a state, whether or not they are college graduates. Many of the legislators with whom I spoke mentioned the public good functions or spillover effects of higher education, but I there is little data about the view of the of the population in the state who may believe that the only people who benefit from higher education are those who receive it. It will be important that higher education administrators investigate ways to increase awareness of the public good functions of higher education, not only with legislators but also with the larger populace.

In terms of the majority of legislators themselves, they do see both the private and public good aspects of higher education. The passion some of them felt for the need to fund higher education, and to return it to prior levels of funding, was quite apparent. Some participants seemed frustrated by the unwillingness of some of their colleagues in the legislature to consider changes in revenue streams that would increase the amount of general revenue available to fund higher education and other state departments. Others, however, seemed to think that institutions of higher education should still bear a majority of the responsibility for their own funding through tuition revenues through increased

enrollment. Such differences in opinion regarding where the responsibility for funding higher education lies may factor into discrepant beliefs among legislators as to how much higher education should receive via state appropriations, leaving higher education at risk for continued underfunding.

Additionally, participants mentioned several of the same issues (e.g., increased participation in voting, decreased crime rates, increased property values, and better health) whether they were discussing private or public benefits of higher education. This highlights that the lines between these types of benefits are not clearly delineated. They can be separated for theoretical discussions such as this one, but in practicality, they are intertwined, and always will be. Participants also identified several benefits in a private good context, despite the fact that the point they were making was, in fact, a public good argument. Without clearly indicating that benefits are private *and* public, there is a risk that legislators and the public may not see the need to prioritize funding for higher education in light of the benefits to everyone in the state. The private benefits cannot be denied, but the public benefits tend to be overlooked.

Implications for Policy and Practice

Most legislators in this study understood that higher education benefits more people than simply those who earn degrees. Expanding the conversation to include the general public about the positive externalities and spillover effects that higher education provides to all residents of the state could garner additional good will toward higher education. The more people know and talk about how higher education benefits all residents of the state (Ehrenberg, 2006; Heller, 2001; Kezar et al., 2005; Koshal & Koshal, 2000; Longanecker, 2005; Reindl & Brower, 2001), the more we may all understand the need for increased appropriations for higher education. With such understanding, perhaps the funding tides could turn for colleges and universities.

Discussions of the importance of raising awareness of the public good aspects of higher education should also take place among higher education administrators, on individual campuses and at the regional, state, and national levels. These conversations could take place at meetings of such groups as the American Association of State Colleges and Universities (AASCU), the Missouri Council on Public Higher Education (COPHE), and the Missouri Community College Association (MCCA), among others.

This topic could also be incorporated into the curricula of preparation programs for future educational leaders and administrators, to help underscore the importance of this issue before they are faced with the realities of the situation in future positions. In addition to simply raising awareness of the idea of higher education *as* a public good in our administrator, educator, and leader preparation programs, we need to also ensure that we are embedding this information in our programs. This includes policy processes and how to shape them, instruction on avenues to effectively advocate for the public good, how to approach and effectively communicate with legislators, and how to ethically respond if the legislation does not adequately support the public good, among other general public policy and public good topics of conversation.

Recommendations for Future Study

This study focused on Missouri legislators' perceptions about public higher education. Future research could build upon this study in a variety of ways. Studies could be designed to gather information about citizens' perceptions about public higher education in the State of Missouri. To increase the depth of knowledge about the legislative process and legislator perceptions in Missouri, this study could be replicated with members of future general assemblies to try to assess the effects of term limits on legislator perceptions on higher education. More information is needed to discover Missouri's voters' knowledge level regarding public goods, the value they place on such goods, and whether they believe funding public goods is important.

Finally, this study could be replicated in other states. Overall, funding for higher education and higher education as a public good have received some attention in the research literature. However, if we want college and university administrators, legislators, and other state citizens to make informed decisions about higher education funding, much more warrants further exploration not only in Missouri, but also in other states.

Conclusions

While the private benefits of higher education are clearly evident, most participants in this study acknowledged that higher education also functions as a public good. However, arguments for the public benefits of higher education have not, as yet, led to increased funding for higher education, even during times of economic wealth in the state. As a public good, higher education benefits more than just those individuals who receive it; it results in positive

outcomes for a larger population than solely its consumers (Ehrenberg, 2006; Heller, 2001; Kezar, Chambers, & Burkhardt, 2005; Koshal & Koshal, 2000; Reindl & Brower, 2001). These spillover effects, or positive externalities, justify its funding through appropriations from the state legislature. At this point, the state needs to consider prioritizing funding for higher education in terms of its public good benefits, and not simply in terms of how much revenue is available to divvy up. Additionally, a dedicated funding source for higher education in Missouri should be considered to help smooth out the peaks and valleys that have followed the balance wheel (Hovey, 1999) method of funding.

The ongoing competition for funds between higher education and other public goods is well documented (Alexander & Layzell, 2006; Archibald & Feldman, 2011; Baer, 2005; Cheslock & Gianneschi, 2008; Delaney & Doyle, 2007; Ehrenberg, 2006; Garland, 2009; Hauptman, 2001; Higdon, 2003; Jacoby & Schneider, 2001; Kane et al., 2003; Longanecker, 2005, 2006; McMahon, 2009; Mumper, 2001; Okunade, 2004; Reindl & Brower, 2001; Rizzo, 2006; Russell, 2008; Selingo, 2003; Vedder, 2004; Zumeta, 2001). While this study found that Missouri's legislators see education as a priority, it is critical for administrators to continue to keep the public functions served by higher education at the forefront in conversations with legislators (Paulsen & Toutkoushian, 2006; Solutions for Our Future, 2010) and other citizens (Kezar, 2005). As Kezar reminds us, "if policymakers and the public do not have a clear picture of why investment in higher education matters, including the social and public benefits, other public policy priorities may end up gaining more support than higher education" (p. 319).

The participants in this study noted the importance of higher education for the residents and the economy of Missouri; one even commented that higher education "changes everything." Higher education administrators need to keep the lines of communication with Missouri's legislators and voters open to keep reminding them of both the private and public good functions of higher education, and to continue the dialogue regarding the need for a dedicated revenue stream or more stable funding model for higher education in the State of Missouri.

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