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LETTER FROM THE EDITORS

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STUDENT EFFORT: THE INFLUENCE OF RELATEDNESS, COMPETENCE AND AUTONOMY

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ABSTRACT

Instructors may encourage students to undertake learning activities with greater effort by conveying the benefits of reaching a goal related to the activities. For instance, they may stress the benefits of obtaining a marketing degree as they assign learning activities to the students. This study complements the goal-oriented approach by examining students' perceptions of relatedness to the instructor, competence and autonomy that form as they pursue their goals. The influence of these psychological needs is examined to determine if the degree of their fulfillment is related to the quality of student effort. Findings show interrelationships of the psychological needs and that fulfilling the needs leads to increases in the quality of student effort. A structural equation model is conceptualized and hypotheses are tested using data collected from marketing students. Recommendations for future research are provided.

INTRODUCTION

Structuring and implementing courses that encourage students to make an effort to learn is a challenge for instructors. It is critically important to meet the challenge because the effort extended is possibly the most important determinant of students' academic success (Pace, 1979) and personal and social development (Ethington & Horn, 1996). For years, the importance of encouraging student effort has been recognized. Summing up 20 years of research, Pascarella and Terenzini (1991, p. 610) note "that the impact of college is largely determined by the individual's quality of effort and level of involvement in both academic and non-academic activities.''

Studies in the marketing literature that are based on goal-oriented theories suggest that increases in effort can be achieved by raising the student's awareness of benefits associated with achieving a goal. For instance, an instructor may explain how doing well in a course (goal) by performing learning activities will help the student secure a good job (benefit) after graduation. While it is important to convey the benefits of reaching a goal, we also believe that an instructor's influence on the fulfillment of a student's psychological needs (i.e., relatedness competence and autonomy) contributes to the quality of effort exhibited. A review of the marketing literature revealed that the three psychological needs have not been studied to determine their influence on the quality of student effort. Of these needs, competence and

autonomy have been examined but with respect to the professor as a brand and how fulfilling them facilitates a student's feeling of attachment to a professor (Jillapalli & Wilcox, 2010).

Self-Determination Theory (SDT) identifies competence, relatedness and autonomy as innate psychological needs that are the basis for a person's self-motivation (Ryan & Deci, 2000; Deci & Ryan, 1985). Drawing these constructs from SDT, we conceptualize and test a model representing interrelationships among them and their influence on the quality of student effort. This study contributes to the literature by showing how student effort can be influenced by means other than explaining the value of reaching a goal, thus complementing goal-oriented research. Although instructors may be doing things that influence students' perceptions of the three psychological needs, they may not know about the effect of their actions on effort. Study findings reveal the influence of fulfilling the three needs, thus highlighting their importance and suggesting that instructors give attention to each one of them. In addition to this contribution, we conceptualize "the quality of effort" to include a second dimension that is not captured by existing measures.

STUDENT EFFORT

Quality of effort is defined as voluntary behavior or personal investment that a student makes for their education and it has been examined as how often students carry out learning activities, such as taking detailed notes during class (Pace, 1998). Understanding how to improve the quality of student effort is beneficial because it increases students' academic development (Pace, 1979). The need to place attention on improving student effort is highlighted by a study of 3,000 college students enrolled from Fall 2005 to Spring 2009 in 29 four-year colleges and universities. The findings revealed that many of them during a two year period did not improve in their critical thinking, complex reasoning, and written communication skills (Arum, Roksa & Cho, 2011; Arum & Roksa, 2011). Many of the study participants reported they "experience only limited academic demands and invest only limited effort in their academic endeavors" (Arum & Roksa, 2011, pg. 204). The researchers recommend using more rigorous assignments to improving learning among college students, thus necessitating greater student effort.

A dilemma that may be faced by instructors is that when they want to increase or maintain course rigor, some students have inaccurate interpretations of what constitutes an adequate level of effort. Beliefs vary among students because during high school and college they experience diverse educational settings requiring different levels of academic effort. Students consider these previous experiences and outcomes (e.g., grades) when choosing how much effort to exert during a course. When instructors find that students' interpretations of the effort needed for a course are inaccurate, they have some alternatives for addressing the situation. They may encourage greater effort, assign failing grades, or reduce course rigor to align with the students' lower expectations of the effort needed. The instructor's dilemma can be

resolved by explaining the effort needed and reviewing study methods, thus encouraging greater effort.

Although this solution by an instructor may help students gain a more accurate understanding of how often they need to study, some may simply "go through the motions" without being engaged in their learning. Some students may accomplish activities but with little effort being applied. The likelihood of this situation led us to expand the quality of effort concept (Pace 1979, 1998) which entails how often learning activities occur. We expand the concept to include not only how often learning activities occur but also the intensity with which a student is engaged in learning. The intensity of student effort is the student's perceptions of how hard he, or she, works on course activities.

MODEL DEVELOPMENT: RELATEDNESS, COMPETENCE AND AUTONOMY

We present a model with hypotheses to support testing interrelationships and the influence of relatedness to the instructor, competence and autonomy on student effort. We hypothesize the influence of relatedness, competence and autonomy on the intensity of student effort. In addition, we hypothesize that the intensity of a student's effort in completing learning activities influences how often the activities are undertaken. Figure 1 presents hypothesized relationships.

Figure 1
Student Effort: The Influence of Relatedness, Competence and Autonomy
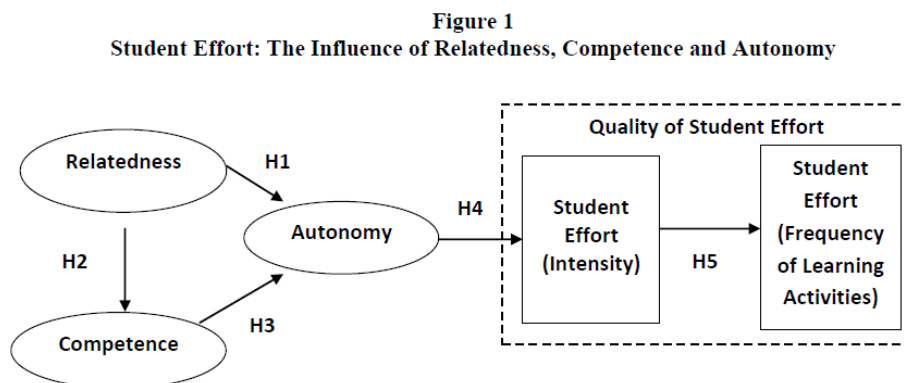
As noted, we seek to determine if student effort can be influenced by means in addition to the approach suggested by goal-oriented theories. Research based on goal-oriented theories has examined the motivators of students as *what they want* (i.e., benefits) associated with achieving a goal. Students' perceptions of benefits received from achieving objectives have been attributed to increases in intrinsic-extrinsic motivations that are related to increases in effort (Jaramillo & Spector, 2004; Tyagi, 1985). Of these studies, one found a positive relationship between intrinsic motivation and student effort (Jaramillo & Spector, 2004). The other study reported that goal content, perceived as intrinsically or extrinsically motivating, positively influences student effort

with intrinsic motivation having greater influence (Tyagi, 1985). Taking the goal-oriented approach, instructors can motivate students by communicating the benefits attainable by achieving the goal. The benefit wanted by students could be a long-term want, such as a better job after graduation, or the benefit may be shorter-term. For example, a student may want to take an advanced course that can only be fulfilled by achieving the goal of passing a prerequisite course. In both cases, there is a benefit (i.e., goal content associated with accomplishing the goals).

While it is important to convey the benefits of reaching a goal, this study considers influence of the student's perceived fulfillment of psychological needs and how it contributes to the quality of effort exhibited as students strive to reach goals. Examining the influence of students' perceptions of relatedness to the instructor, competence and autonomy complements the previously noted goal-oriented research. If significant relationships between the three psychological needs and student effort exist, then there is support for paying attention to these psychological needs as well as applying the goal-oriented approach.

We draw on Self-Determination Theory (SDT) which takes a different perspective than goal-oriented theories to explain motivation. SDT focuses on the influence of the three psychological needs (i.e., relatedness, competence and autonomy) that individuals want to satisfy (Deci & Ryan, 1985). While other psychological needs may be salient, these three are related to increases in people's sense of well-being (Reis, Sheldon, Gable, Roscoe & Ryan, 2000) and associated with activities described as satisfying (Sheldon, Elliot, Kim & Kasser, 2001). While striving to reach a goal, a student is likely to be motivated to satisfy these needs because their fulfillment provides a sense of well-being and satisfaction.

Relatedness is defined as the extent with which someone feels connected to others (Deci & Ryan, 2000). The perception of relatedness to the instructor develops as the student gets to know the instructor while taking a course. Autonomy is defined as the extent with which someone *makes their own choices* satisfying their own internal desires (Deci & Ryan, 2000; Ryan & Connell, 1989; Sheldon & Elliot, 1999). As a student's perception of relatedness increases, the student's autonomy is likely to increase because the instructor is better able to convince the student why it is important to learn course concepts. Perceptions of autonomy increase because it is likely that students will believe the instructor and decide *on their own* that it is important to undertake course activities.

A self-determination process occurs as the student adopts as their own the external motives for doing something (i.e., reasons to study) that are conveyed by an instructor (Ryan & Deci, 2000; Deci & Ryan, 1985). As the motives are internalized, a shift in the perception of locus of causality occurs; the externally generated reason for doing something becomes at least partially intrinsic. The reason is not fully attributed to the external source (Deci & Ryan, 1985; Blais, Sabourin, Boucher & Vallerand, 1990; Ryan & Connell, 1989). To summarize, increases in the student's perception of relatedness to the instructor influence student perceptions of

autonomy that increase during a self-determination process. Therefore, we advance the following hypothesis:

> *H1   Relatedness to an instructor is positively related to student autonomy perceptions.*

Competence is defined as an individual's perceived capacity to function effectively in an environment (White, 1959). Students are likely to perceive greater competence with transference of the instructor's knowledge and this is more likely to occur with increasing levels of student perceptions of relatedness. As the perception of relatedness increases, the instructor gains a better understanding of learning difficulties experienced by the student. In response, it is likely that helpful advice is given on how to accomplish learning activities, thus improving performance and influencing student perceptions of competence. Therefore, we anticipate a positive relationship between a student's perceptions of relatedness and competence.

> *H2   Relatedness to an instructor is positively related to student competence perceptions.*

A student's perception of competence develops from exploring, learning and adapting to different situations (Deci & Ryan, 1985). According to SDT, individuals by their very nature will make efforts to meet challenges, thus improving their competencies (i.e., skills and abilities). The student's desire to increase competencies is likely to influence the student to choose *on their own* to carry out learning activities that will help improve competencies. Therefore, we hypothesize a positive relationship between the students perceived competence and autonomy.

> *H3   Perceptions of competence are positively related to student autonomy perceptions.*

We hypothesize that a student's perceived autonomy is positively related to the intensity of effort exhibited by the student. The context of a student completing learning activities helps to provide reasoning in support of the hypothesized relationship. When a student's belief that a learning activity has little value and should be done only because the instructor wants it completed, then it is highly likely that a lower level of perceived autonomy exists. In contrast, when the student chooses to accomplish an activity in order to satisfy internal desires, perceived autonomy is likely to be higher with greater effort being exhibited by the student.

When deciding *on their own to make an effort*, perceived autonomy increases with an accompanying shift from extrinsic to intrinsic motivation. The self-determination process leads to the external reasons for completing an activity being at least partially adopted by the student as one's own motives for making an effort. The increasing intrinsic motivation contributes to

greater levels of effort. This reasoning is supported by research indicating that students' perceptions of autonomy are related to their motivations (i.e., intrinsic, extrinsic, or both) that are associated with effort (Jaramillo & Spector, 2004; Tyagi, 1985; Young, 2005).

As noted, we conceptualize the intensity of student effort as the student's perception of how hard he or she works on course activities. The intensity suggests student involvement in learning so it is likely to influence how often learning activities are completed. Therefore, we also hypothesize a positive relationship between the intensity of student effort and the frequency with which a student accomplishes learning activities.

> *H4*   *Perceptions of autonomy are positively related to the intensity of student effort.*

> *H5*   *Intensity of student effort is positively related to how often students use study methods.*

METHOD AND FINDINGS

Questionnaires were administered during two semesters to students enrolled in seven upper division marketing courses at a public university. A total of 168 questionnaires were completed and 160 retained for data analyses. When responding, students were asked to think about a class taken during the previous semester and 63.1% selected a marketing class. Respondents were juniors (45%) or seniors (55%), male (43%) and female (57%) between the ages of 20 and 29 (93%). During the previous semester, 95% of the students took 12 or more course credit hours and 48% worked between 16 and 25 hours a week. The majority of students (87%) held an <u>overall</u> GPA of 2.7 to 3.6 and 53% of respondents reported a GPA of 2.7 to 3.4 within the marketing major.

Previously published scales were used to measure perceived competence and perceived autonomy (Williams & Deci, 1996). Measures for perceived relatedness to the instructor and the intensity of student effort were developed for this particular study. The student effort measure of how often learning activities were completed includes questions related to writing activities because all students were required to complete writing assignments during all courses taken at the university. The questions were modified from ones included on the College Student Experiences Questionnaire (Pace & Kuh, 1998). Revisions were made to measures based on feedback received from students during pretests.

Exploratory factor analysis (Table 1) was completed on all scale items and only those with loadings of .50, or greater, were retained for further analysis. Subsequently, confirmatory factor analyses were completed with LISREL 8.51 (Joreskog & Sorbom, 2001) using a covariance matrix and maximum likelihood estimation.

Table 1: Exploratory Factor Analysis					
Construct and Scale Item (n=160)	Factor				
	1	2	3	4	5
Relatedness (to Instructor)					
REL1 The instructor was friendly towards me.	**.854**	.005	-.002	.193	.184
REL2 The instructor did not wish to spend much time with me.(R)	**.814**	-.082	.110	.086	.018
REL3 I was able to get along with the instructor of this course.	**.802**	-.026	.071	.152	.201
REL4 Overall, it was difficult to get along with the instructor (R)	**.665**	-.128	.039	.166	.074
REL5 The instructor seemed to understand challenges I face when learning.	**.650**	-.008	.181	.102	.128
Student Effort (Frequency of Learning Activities)					
EFFACT4 Asked someone for advice and help to improve your writing.	-.013	**.862**	.037	-.036	-.051
EFFACT1 Asked people to read something you wrote to see if it was clear to them.	.066	**.771**	.134	.061	.092
EFFACT2 Referred to a book or manual about writing style, grammar, etc.	-.206	**.631**	.116	-.052	.190
EFFACT3 Revised a paper two or more times before you were satisfied with it.	-.078	**.568**	.058	.138	-.023
Intensity of Student Effort					
EFFINT 1 I worked very hard in this class.	.073	.267	**.737**	.112	.215
EFFINT 2 I spent a lot of time and effort completing the assignments in this class.	.019	.236	**.725**	.192	.121
EFFINT 3 I didn't try very hard in this class. (R)	.085	.021	**.678**	-.086	.048
EFFINT 4 In this class, there were times when I just acted like I was listening. *	.145	-.044	.407	-.084	.195
Competence					
COMP2 I was fully capable of learning the material in this course.	.173	.034	-.029	**.821**	.153
COMP1 I felt confident in my ability to learn material in this course.	.200	.042	-.095	**.731**	.326
COMP3 I was able to meet the challenge of performing well in this course.	.238	.078	.139	**.624**	.101
Autonomy					
I participated actively in the class because: AUTO3 A solid understanding of the subject is important to my intellectual growth.	.096	.181	.253	.217	**.746**
AUTO1 I felt like it's a good way to improve my understanding of the material.	.237	.104	.248	.254	**.633**
AUTO2 I would feel proud of myself if I did well in the course.	.269	-.064	.165	.197	**.505**
Maximum Likelihood Estimation with Varimax Rotation					
Responses obtained using 7-point scale.					
Scale anchors for Student Effort (Activities) were 1- never, 4-often, 7-very often					
Scale anchors for all other constructs were 1-not at all true, 4–somewhat true, 7-very true					
* Loading Below .407. Dropped from SEM					

Construct scale items, standardized loadings and t-values are reported in Table 2. Acceptable fit exists with indexes exceeding the generally accepted value of .90. Indicators load significantly on related latent variables, thus demonstrating internal consistency reliability.

Table 2: Confirmatory Factor Analyses		
Construct and Scale Item	Loading *	t value
Student Effort (Frequency of Learning Activities		
EFFACT4 Asked someone for advice and help to improve your writing.	.80	11.62
EFFACT1 Asked people to read something you wrote to see if it was clear to them.	.65	11.24
EFFACT2 Referred to a book or manual about writing style, grammar, etc.	.58	8.72
EFFACT3 Revised a paper two or more times before you were satisfied with it.	.82	7.65
Intensity of Student Effort		
EFFINT 1 I worked very hard in this class.	.88	11.56
EFFINT 2 I spent a lot of time and effort completing the assignments in this class.	.74	9.71
EFFINT 3 I didn't try very hard in this class. (R)	.57	7.37

Model Fit (n=160)χ^2=19.41; 13 df, p=.11 RMSEA=.054 NFI=.95 GFI=.97 AGFI=.98 CFI=.1.00			
Relatedness (to Instructor)			
REL1 The instructor was friendly towards me.		.91	14.72
REL2 The instructor did not wish to spend much time with me.(R)		.76	11.28
REL3 I was able to get along with the instructor of this course.		.85	13.16
REL4 Overall, it was difficult to get along with the instructor (R)		.63	8.72
REL5 The instructor seemed to understand challenges I face when learning		.68	9.63
Competence			
COMP2 I was fully capable of learning the material in this course.		.82	11.79
COMP1 I felt confident in my ability to learn material in this course.		.85	12.29
COMP3 I was able to meet the challenge of performing well in this course.		.64	8.66
Autonomy			
I participated actively in the class because:			
AUTO3 A solid understanding of the subject is important to my intellectual growth.		.77	11.08
AUTO1 I felt like it's a good way to improve my understanding of the material.		.81	11.79
AUTO2 I would feel proud of myself if I did well in the course.		.59	8.66
Model Fit (n=160) χ^2=37.08; 40 df, p=.60 RMSEA=.000 NFI=.96 GFI=.96 AGFI=.94 CFI=.1.00			
Responses obtained using 7-point scale. * Standardized loadings Scale anchors for Student Effort (Activities) were 1- never, 4-often, 7-very often Scale anchors for all other constructs were 1-not at all true, 4–somewhat true, 7-very true			

A structural equation model was generated to evaluate the hypotheses. The results (Table 4) suggest that H1 through H5 cannot be rejected because all relationships have a t-value greater than 2.00. The hypothesized model has an acceptable fit, as indicated by a non-significant chi-square (χ^2=163.96, 161df, p=.42) and fit measures generally exceeding .90 with the RMSEA at .01.

Table 4: Structural Equation Model Results				
Hypothesized Model with Standardized Loadings (t-values)				
To **From**	Competence	Autonomy	Student Effort (Intensity)	Student Effort (Frequency of Learning Activities)
Relatedness	H2 .45 (5.52)	H1 .24 (2.67)	---	---
Competence	---	H3 .44 (4.65)	---	---
Autonomy	---	---	H4 .50 (5.78)	---
Student Effort (Intensity)	---	---	---	H5 .41 (4.76)
R^2	20%	34%	25%	17%
Model Fit n=160 χ^2=163.96, 161df, p=.42 RMSEA=.01 NFI=.93 CFI=.1.00 FI=.90 AGFI=.90				

Figure 2 presents the hypothesized relationships with standardized loadings and associated t-values.

Figure 2
Student Effort: The Influence of Relatedness, Competence and Autonomy
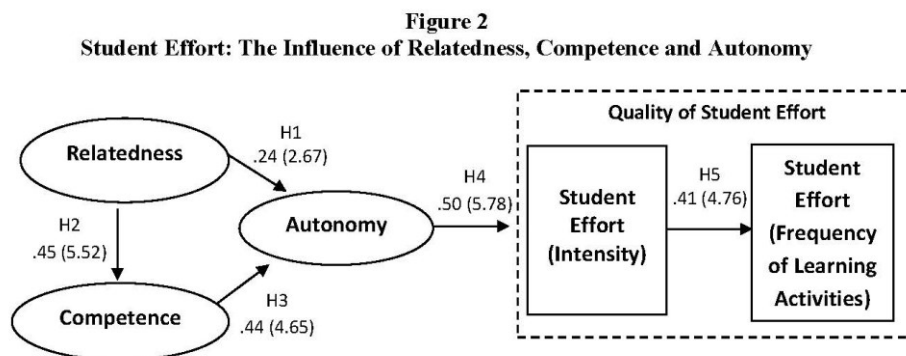
DISCUSSION, LIMITATIONS AND FUTURE RESEARCH DIRECTION

The findings of this study suggest that it is important to employ strategies to increase student perceptions of relatedness, competence and autonomy in order to increase the quality of student effort. It is important to have students choose *on their own* to put forth the time and effort to complete learning activties, thus exhibiting autonomy. Study findings suggest the importance of considering student perceptions of autonomy because they are associated with the intensity of effort that, in turn, influences how often activities related to learning are accomplished. Perceptions of relatedness to the instructor must be considered because they influence autonomy and the perception of competence, which also influences autonomy. As time is spent with a student (increasing perceptions of relatedness) an instructor can address the student's understanding of course material to increase competence. As students get to know an instructor, their interactions provide opportunities for an instructor to improve the student's competence and convey the importance of completing course activities. When students recognize the value of learning activities it is more likely that they will make autonomous decisions to undertake them.

As with any research our study is not without its limitations, some of which suggest areas for future research. The findings from this study are based on responses from students at a single institution so data collected from students at another university may yield different results. Future research could include fielding the study at multiple universities to increase generalizabilty. Another limitation is that one of the dimensions of the "quality of student effort" (i.e., how often activites were undertaken) was measured as writing activities. While the measure adequately represents this dimension of effort, it reduces generalizabilty of results because some schools may not have a writing requirement. Future research could address this by including measures of other forms of student effort.

Although this study shows that significant relationships exist with the three psychological needs, the relatively low R^2 for both dimensions of effort suggests that other factors also influence the quality of student effort. Future research to increase understanding of what influences student effort could also be completed. For example, a study could be fielded to assess influence of the three psychological needs in tandem with motivations stemming from benefits associated with the accomplishment of goals. This would require the integration of SDT and goal-based theories. The findings may yield increases in the R^2 values of 25% and 17% reported for Student Effort (intensity) and Student Effort (frequency of learning activities), respectively. In addition, the context of the educational setting could be examined. Specifically, lecture-based, online or a hybrid courses could be examined to determine differences in the influence of the three psychgological needs. Research of online courses may be very interesting because instructors typically have little face-to-face interactions with students and these appear to be fundamental to students' perceptions of relatedness to an instructor. Finally, there could be a high level of extracurricular activities at a school that divert students attention away from learning activities. These could also be examined to determine if they have a significant influence on the quality of student effort.

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LEARNING COMMUNITIES AND EXPERIENTIAL ENTREPRENEURIAL SUCCESS

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ABSTRACT

This study represents an outcome assessment of an integrated business program at a West Coast university within the College of Business and Public Management (CBPM). Finance, management, and marketing courses were integrated into a highly structured, single 12-unit course and an experiential four-unit learning entity.

The study concluded that participating in this course enhanced students' understanding of entrepreneurship and how the various disciplines were integrated in a business environment. The authors determined through statistical analysis of comparative grades in this course versus the same un-integrated courses taught by the same instructors and the content analysis of the students' comments that such integration had positive outcomes.

Key Words: Learning Communities, Experiential Education; Integrated Curriculum; Linked Courses; Integrated Courses; Integrated Business Program.

INTRODUCTION

There has been much criticism of higher education in recent years. One significant concern is that students in a traditional undergraduate program complete classes without understanding how topics or disciplines are linked holistically. Students tend to work in isolation, absorb course information, pour it into exams, presentations, or papers, and progress to the next semester without any synthesis of knowledge (Hill, 1985; Shapiro & Levine, 1999; Tinto, 2003). A potential solution for this problem is the delivery of education through learning communities.

The definitions of learning communities vary, but simply, a learning community is the combination or integration of sets of courses within different disciplines (with something in common) taught to the same cohort of students (Cross, 1998; Tinto, 2003). An overarching goal is to enable students to apply knowledge in a real-world sense by combining information from

various disciplines and implementing appropriate co-ordinated projects (Cross, 1998; Shapiro & Levine, 1999; Tinto, 2003).

This paper discusses an integrated business program developed at a West Coast university within the College of Business and Public Management (CBPM). Marketing, finance, and management were integrated into a single 12-unit course with an experiential four-unit learning component. The program was initiated in the fall semester of 2011. While there is sparse data available concerning the assessment of outcomes of such programs (Barefoot, Warnock, Dickinson, Richardson & Roberts, 1998; Borden & Rooney, 1998; Knight, 2002), this paper highlights two methods of evaluation of the program. First, the students' qualitative reflections on outcomes in comparison to traditional classes to expand the literature are included. There is a significant gap in the literature concerning student perspectives of integrated programs. Second, assessment data is being collected by the CBPM to compare student grades in the same traditional courses taught by the same professors with those in the Integrated Business Program (IBP). This limited data was analyzed and preliminary results are presented in this paper because grade results are also lacking in the literature.

THE LEARNING COMMUNITY: BACKGROUND

The effort to close the gap between what colleges offer and what the real-world needs comprises many different approaches. Objectives of curricula are to not only enable students to apply knowledge directly to jobs, but to nurture an entrepreneurial spirit in students. One approach to accomplishing these goals is to offer entrepreneurial programs or courses. These programs are provided at graduate and undergraduate levels and could incorporate a number of concepts including initiating a new business, business consulting, managing a company, or venture plan writing and financing (Vesper & Gartner, 1997).

Another widespread method is a community outreach program. These programs can have a number of different structures including a dedicated class or projects within classes, but the aim is to strengthen relationships between the college and the community and to engage students in the idea of giving to the community with a real-world view (Bringle & Hatcher, 2000). Also, business plan competitions predominate worldwide on many college campuses. Developing a business plan for a new business venture allows students to apply learned skills to introduce a new product or service to encourage innovative behavior in students; competitions are often financially supported by corporations (Russell, Atchison, & Brooks, 2008). Simulation is another means of having students integrate knowledge from many courses and use it in a computerized game environment, often seen in senior seminar or capstone courses (Vogel, et al., 2006).

The approach to provide a theory-to-practice environment chosen by this University, based on specific objectives and available resources, was a learning community. The concept of a learning community has a long, rich history and could be arguably linked to the ideas of educator John Dewey at the beginning of the 20th century. Dewey posited that a learning

environment consisting of a close teacher/student relationship, learning by doing, and developing skills to enhance reasoning capabilities promoted lifelong learning (Dewey, 1916). Meiklejohn advanced these ideas by supporting integrated or connected knowledge. His Experimental College at the University of Wisconsin from 1927-1932 was one of the first structured ventures into a learning community environment (Meiklejohn, 1981). From these early roots, many learning community programs have been initiated.

Although the methods, topics, and organization of learning communities vary, many reasons and potential benefits exist for launching such programs. Structures could include introducing freshmen to college life by integrating discipline-based courses with freshman seminars, assisting at-risk or minority students by linking academic and developmental courses, connecting courses within a major, or integrating courses within disciplines (Shapiro & Levine, 1999). Expected outcomes are as varied as the structures of learning communities, but one major benefit is to more adequately ensure that students are prepared for careers. Other goals include connecting professors and students, allowing students to assess how courses and disciplines are integrated, developing faculty, addressing real-world problems within disciplines, and increasing college completion rates (Cross, 1998; Hill, 1985). Professors can connect courses to ensure that students apply material from one course to the other courses. This linkage enhances relationships, both intellectual and social, among the students and helps them bond in the form of a community (Zhao & Kuh, 2004).

In an effort to redress concerns from corporate America and accrediting entities, business schools are rapidly becoming involved with learning communities to support theory-to-practice (Barber, Borin, Cerf, & Swartz, 2001; Hamilton, McFarland, & Mirchandani, 2000; Heinfeldt & Wolf, 1998; Pharr, 2000). To emphasize the importance of learning communities in the business curriculum, the Association for the Advancement of Collegiate Schools of Business (AACSB) 2000 Standard C 1.3. E indicates that "The curriculum should integrate the core areas and apply cross functional approaches to organizational issues" (AACSB, 2000).

With much attention focused on learning communities, it would be expected that significant research would be available on the assessment of the programs. However, research concerning assessment is sparse. Barefoot, Warnock, Richardson, & Roberts (1998) relate to the problem of status of the programs within the university and operating on limited budgets. Borden and Rooney (1998) and Knight (2002) were able to identify higher retention and recruitment as positive outcomes of the programs. Additionally, initial assessment of business integrated programs appears to demonstrate mixed results with issues such as lack of funding and faculty buy-in cited frequently in the literature (Borin, 2004; Hartenian, Schellenger, & Fredrickson, 2001; Pharr, 2000). Likewise Smith (2001) iterates that faculty acceptance could be remiss because individuals are concerned about tenure and promotion and are unsure where the programs fit in the advancement structure. However, the lack of assessment of learning outcomes based on student input and grade comparison between non-integrated and integrated courses is evident.

Learning outcome assessment components in these courses consisted of quizzes/exams and participation. Additionally, the professors established rubrics to evaluate the development of the business plan. Implementation of the business plan was measured including achievement of stated goals and the demonstration of adoption of new strategies as needed over the semester. Peer evaluations were also used. Although there is a plethora of research on evaluation of learning outcomes (see Astin, 2012; Gibbs & Simpson, 2004; Prosser & Trigwell, 1991), the professors involved with the IBP identified the lack of assessment of learning outcomes in the literature in a learning community environment. Also, analysis based on student input and grade comparison between non-integrated and integrated courses was sparse.

Due to a dearth of literature on assessment of these programs, the professors involved with this University's integrated business program felt it was important to add to the assessment literature to assist colleges in the development of similar programs. Although in its infancy, the outcomes in the program outlined in this paper have been positive and significantly expand the scope of learning community research and evaluation of student learning.

DESCRIPTION OF THE INTEGRATED BUSINESS PROGRAM (IBP)

Program's Purpose

The purpose of the Integrated Business Program within the College of Business and Public Management is to enhance student learning through an integrated business curriculum by combining finance, management, and marketing into a single 12-unit course and to overlay the integration with a four-unit experiential learning course component. During the semester, the students form a company, determine a target market and product, develop a business plan, seek a loan from a bank, and sell the product throughout the semester.

As a lesson in social responsibility, profits are donated to a non-profit entity of their choice. The charities selected were the American Cancer Society, the Leroy Haynes Center which serves more than 450 boys and girls of all ages and their families through programs that include: Non-Public School, Residential Treatment, Mental Health Services and Community Outreach, and the Make-A-Wish Foundation of Greater Los Angeles which helps grant a wish to children between the ages of 2 ½ through 18 with life-threatening medical conditions.

Expected outcomes include:
1. Students should be able to demonstrate at least the same level of functional competency that can be achieved in the traditional delivery mode.
2. Students should be able to identify the interdependence of the three functional areas and the impact on decision-making.
3. Students will acquire a real-life reference point that they can utilize in their remaining business core courses and electives.

4.   Students should be able to demonstrate that they are socially responsible
citizens by operating their business in an ethical manner and giving back
to their communities.

Organization

All four courses are scheduled for the same days. The three academic courses are scheduled during morning and early afternoon hours. The experiential course or practicum is scheduled for later in the afternoon so the students can apply the lessons learned in the previous class sessions.

There is also a student advisor assigned to the program. The advisor has taken the program previously and acts as a consultant. The advisor does not direct the efforts of the students, but acts as a resource when the students have questions about aspects of their business. The advisor also records notes for each class session and sends them to the instructors after each class. The notes are used to adjust classroom material and to anticipate future problems.

Student Profile

The program consists of traditional-aged students who are mainly sophomores and juniors. The courses are part of the core requirements for a Bachelor's degree in Business Administration so seniors currently in the system would usually have taken these courses earlier.

The University has a highly diverse student population in terms of both gender and ethnic background so there is a wide range of experience in the classes. Most students have some work experience at entry-level jobs. Some students continue to work while enrolled in the program.

The Business Plan Process

The first activity for the students in this program is to select a target market, then a product. The second activity is to organize their company with respect to the key managers: President, Vice President of Finance, Vice President of Operations, Vice President of Marketing, and Vice President of Sales. This proved to be a significant challenge because the students had no prior experience in starting a company.

A considerable amount of time was spent in accomplishing these tasks. This placed pressure on the students because they had less time to sell and distribute their product. In recognition of this, the participating faculty arranged meetings with the students well in advance of the beginning of the semester. The task of accomplishing these activities was presented to the students along with introducing the students to their student advisors. The advisors were students who had completed the program successfully.

The students were also given a weekly schedule for the semester which presented the topics for each course for each week. In addition, the meeting with the bankers (see description on page 10) was also scheduled along with a dress rehearsal to be held one week prior to the

meeting. Strong emphasis was placed on completing the business plan well in advance of the meeting with the bankers. The major sections of the business plan are presented below:

1. **Executive Summary**

   This section serves as an introduction to the company. The section is a one-page description of the product, the market, operations, management, capital budget, and projections of revenues and expenses.

2. **Operations**

   This section describes the day-to-day activities of the company. It includes a description of the product along with any technical details, if appropriate. The primary supplier of the product and alternative sources of supply are presented. The analysis used in selecting the primary supplier is also presented.

   Inventory control procedures are an integral part of this section. If sales are higher than forecasted, detailed plans for ordering, shipping times, and inventory management are shown here.

3. **Management**

   The management part of the integrated business plan focused on examining basic concepts of management theories, functions and applications in an intercultural context.

   This section reviewed the primary management functions of planning, organizing, influencing, and controlling and considers cultural variations in selection and implementation of approaches. Course content included discussion of current topics including learning organizations, transformational leadership, continuous quality improvement, and employee empowerment. The importance of consideration of ethics, social responsibility, and the impact of cultural diversity on management practices and globalization of business is discussed throughout the course. Effective decision making processes, the importance of interpersonal skills, and the ability to operate successfully in groups are stressed.

   In addition to introducing the subject of management history and current thinking, the management portion of this integrated course focused on the following topics:

Part A: Organizing and Organizational Structure

   In this part, students learned the fundamentals of organizing and how to define their organizational objectives (including guidelines for quality objectives) and how to achieve such objectives. Additionally, while students learned the organization's responsibility, authority, and delegation, they were introduced to the subject of organizational structure and design and learned how to design their organization and perform the job descriptions and specifications of the major tasks.

Part B: Strategic Planning

The students learned how to state their goals (including sales and profits) and how to address the subjects of their organization's strategic planning, tactics, and their organization competitive advantage and competitive landscape. SWOT analysis was emphasized. Additionally, they were asked to address and plan for growth.

Part C: Decision Making

In this part, students learned the importance and the process of making the right decisions to ensure management success. Additionally, ethical practice, a code of ethics, how the organization will be socially responsible, and how to sustain the organization were emphasized.

Part D: Summary

Finally, while the students were told and encouraged to focus on the above-mentioned subjects, they were also asked to make intelligent assumptions in their plan. It was emphasized to them that creativity will most likely be necessary since they will not have access to much market data and that they need to be sure to clearly state any assumptions made and to include additional information in each section other than the questions and topics highlighted above.

It is important to note that various management topics were also introduced to the students including diversity, managing in the global arena, organizational change, stress, organizational conflict, communication, groups and teams, culture, motivation, leadership, and controlling.

4.   **Marketing**

As mentioned previously, there was an initial meeting with the students well ahead of the start of the semester. The purpose of this meeting was to help them gain an understanding of the challenges of the program, but also to encourage early thinking about the target market and a possible product. The meeting with the bank was scheduled five weeks from the start of the semester, so writing the business plan was their first major task. The SWOT analysis was completed in the Management course, so the marketing team first investigated target markets based on potential opportunities. This was done through secondary research concerning size, demographics, lifestyles, and purchase behavior of their identified target markets.

The students also spoke to people in the potential target markets to gain anecdotal data. Concurrently, they were considering products that would add value to the target markets and began to talk to suppliers. Ideally, the students should have the target market and product clearly determined and justified in the business plan before the start of the semester. They also stated how they wanted to be positioned in the marketplace based on an image that would be significant and meaningful to their target market.

Once the target market and positioning statement were complete, they began to develop survey strategies for their target market to assist with sales forecasts, product colors and sizes,

and pricing. They developed the 4Ps of the marketing mix consisting first of the product description, producer information, product photos, and specific benefits for the target market. Future target markets with subsequent versions of the product or different products were also elaborated in the plan. Labeling and packaging concepts were included.

Promotional plans were developed in alignment with the lifestyle and purchasing behavior of their target market. Because the students typically choose college students as their target market, social media was at the center of promotional activity with Facebook, Instagram, and Twitter. The promotional mix has consisted of advertising on the campus radio station and in the campus newspaper, flyers on campus, and on monthly calendars distributed by the Campus Activities Board. They developed websites for their companies from which customers could place orders. They also identified public relations opportunities, such as having articles written about the project in the campus newspaper. The majority of the activities in the promotional plan consisted of personal selling with tables at campus events and on other days. Sales promotional tools such as contests were also used while they were selling on their own or on other college campuses.

Many distribution strategies are typically discussed, but because of the time limitation of one semester, a direct channel to the target market is typically chosen.

Pricing is determined from the results of "willingness to buy" questions in their surveys. They also had chosen a main vendor at this point and they know the cost of goods sold. The financial group then gets involved with all expenses to finalize a price.

Finally, they develop a calendar of scheduled events with students assigned to each. Once the loan from the bank was obtained, the teams began to implement marketing strategies. An important part of this implementation was evaluation as they proceeded and making adjustments as necessary to meet forecasted sales.

5.   **Finance**

The Finance course in the program was presented in two major sections. The first part of the course presented topics that were relevant to the business plan. The second part of the course presented topics that are part of a traditional undergraduate course.

The topics presented in the early part of the course included time value of money, short term financial management, capital budgeting, inventory management, working capital management, and ratio analysis. The latter part of the course included capital structure, financial forecasting using the percent of sales method, stock and bond valuation, risk and return and the capital asset pricing model, investment banking, and international finance.

Financing for the company was in the form of a loan from a national bank that donated funds to the university. The bank sent two bank officers to review the presentations and make comments on the viability of the proposals. The form of the financing was a line of credit with standard terms offered to established businesses.

After presenting the time value of money concept, extensive time was spent on financial projections. An actual business plan with a capital budget and projections was made available to the students. The sections of the business plan were discussed as they related to the budget and projections. The guiding principles for the class discussions were a thorough understanding of the business and the presentation to the bankers to secure the financing.

The projections focused on integrating short and long term financial management. As stated above, the bank presentation took place in week 5 of a 15 week semester. The projections included revenues and expenses weekly for 10 weeks and annually for the next 3 years. Numerous drafts were reviewed by the faculty and revised by the students before a final version was completed.

The next section of the course focused on short-term cash and inventory management. Topics included formulating a short-term cash budget which integrated anticipated revenue collection policies coordinated with inventory purchases. This exercise assisted students in preparing cash flow statements on a weekly basis.

The in-depth analysis necessary to prepare the budget and projections prepared the students for the detailed questions from the bankers. After the students received the loan and began operations, they were required to submit income statements, balance sheets, and cash flow statements on a weekly basis. The lesson learned by all students was the importance of accurate record-keeping for all aspects of the business including purchases, inventory, sales, expenses, and cash balances.

In some cases, accurate and timely information was not provided. The students were then advised that the CFO could not complete the financial statements without information from the other departments in the company. As a result, the students were informed that the final grade would reflect the lack of accurate financial information on a continuing basis.

In one instance, the COO placed a large order for new inventory with only three weeks left in the semester. There was no coordination with the CFO, Vice President of Sales, or the President. This demonstrated a lack of financial controls and committed the company to a high level of sales to clear out the inventory by the end of the semester. This necessitated a more direct involvement by the finance instructor to educate the students as to the numerous mistakes committed in this incident.

The financial results comprised 25 percent of the final grade in the finance course. Adjustments were made for the overly optimistic initial sales projections and credit was given for achieving a reasonable level of profits. The major lesson learned by the students was the importance of accurate record-keeping and the relevance of accounting statements in making sound business decisions.

Bank Presentations

A national bank donated the initial funding for the program and allocated the services of two commercial loan officers to assist in the evaluation of the student businesses. After the

business plan was completed, a meeting was arranged with the students to make a formal presentation to the bankers as part of the loan application process.

Approximately one week prior to the meeting, a dress rehearsal was held in which the students presented their business plan to the faculty. The faculty asked questions similar to those anticipated to be asked by the bankers. In addition, comments were made on the style of the presentation, the students' appearance, and other details.

The students then presented the marketing, operations, and financial aspects of their business to the bankers. To the credit of the bank and the bankers, the presentation was taken as a serious application for a business loan. The bankers also treated the students as business professionals. The bankers did not "talk down" to the students, nor were any concessions made for the students' lack of experience.

Upon completion of the meeting, the bankers informed the students that they would review the business plan and the financial projections and reply with a loan proposal promptly. The students were informed that there was a possibility that the loan application could be denied. Given the close involvement of the faculty and the comprehensive preparation by the students, the risk of being denied was minimal.

The bankers responded with loan terms typical of a commercial line of credit. The terms included an interest rate calculation based on the prime rate plus a spread of 5 percent. The remaining terms addressed the maximum amount of time that the loan could be outstanding and the purpose for the funding.

At the end of the semester, a second meeting was held with the bankers to review the progress of the business. There was no dress rehearsal since the students had prior experience meeting with the bankers. The financial statements for the business were sent to the bankers prior to the meeting so the bankers were well-prepared.

The bankers asked for an explanation of actual revenues and earnings compared to projected revenues and earnings. Again, the bankers treated the students as business professionals and expected detailed explanations for the results. The bankers also asked the students for their views and opinions of the integrated program. In general, the students responded that they had no prior understanding of the relationship among the various departments in a business and the attention to detail necessary for success.

Resources

The design and implementation of the integrated program required significant time and financial commitment by the University. The Dean and four faculty attended an Association of American Colleges and Universities (AAC&U) conference in the summer of 2010 to begin the process of designing the curriculum. Efforts continued during the 2010-2011 academic year.

Since the courses have prerequisites, student advisors and faculty were notified of the new program and began to recruit students for the fall semester of 2011. The advisors also suggested to other students that they arrange their schedules so that these students could qualify

for the program in future semesters. The enrollment was 5 students in the fall, 2011 semester, 8 students in the spring 2012 semester, and 24 students in the fall, 2012 semester.

The response from the faculty and the students for the 2011-2012 academic year was extremely enthusiastic. As a result, the Integrated Business Program may be required of all students entering in September, 2013.

Although it is difficult to associate a specific dollar value to the time commitment of the faculty and administrators in the College of Business and Public Management, some of the direct costs associated with such a program included:

1. Cost of visits to campuses having experience with an integrated business program
2. Faculty training through attendance at conferences
3. Development of unique instructional material
4. Annual cost for the coordinator of experiential learning
5. Annual delivery cost after the development of the program

If possible, the faculty assigned to the program should have prior business experience. The students will be asking practical questions about their business and require practical answers.

During the semester, the faculty responsible for the program met weekly to exchange information about their experiences in their respective courses. This helped in identifying problems in one course that could have affected the other courses. For example, personality conflicts among the students in one course may not necessarily manifest themselves in the other courses.

RESEARCH METHODOLOGY

This study assesses the outcomes of the Integrated Business Program in helping students to relate academic material to actual business settings and create a positive learning community. The research methods used in this study tested variables related to the students' understanding and learning of three business integrated courses (i.e. finance, management, and marketing). The courses are complemented with a practicum to execute learning via the creation of an actual business for profit.

The methodology to assess such results is based on interpretation of responses obtained from the student participant testimonials in addition to a comparative analysis of the IBP students' grades to grades of other student groups who did not take the integrated course, but were taught by the same professors.

The study included 13 college business majors who participated in the IBP program in the fall and spring semesters of the 2011/2012 academic year and 24 students in the fall of 2012, a total of 37 students.

Procedure

Student participation in this study was voluntary and survey responses were confidential. Participating students were asked to write a one page plus or minus testimonial regarding their experiences (positive and/or negative). To ensure the validity and the confidentiality of the collected information, said testimonials were done after the end of the semester and after students were given their final grades.

Participants' grades were compared to a control group of students who did not participate in the IBP, but were taught the same classes by the same professors. No consideration was given to other testing factors such as the student's ethnic background, gender, progress towards his/her degree, belief about academic preparedness, or financial status.

Participants and Setting

The sample included 37 business students who participated in the integrated business course who are referred to as the experimental group (n=37) of which 46% were women (n=17) and 54% were men (n=20).

In addition to comparing their grades with non-participants (the control group), participants were given a blank piece of paper in the classroom and asked to write what aspects of this program were satisfying (or dissatisfying) to them personally and helped them (or did not help) understand the subject matter. Table 1 summarizes the sample characteristics.

Table 1: Characteristics of Sample (N= 37)		
Gender	Number of students (n)	Percentage (%)
Male	20	54
Female	17	46
Total	**37**	**100. 00**

Research Propositions

The following a priori propositions were developed by the researchers:

Proposition 1: A positive relationship will be found to exist between participation in the IBP and students' increased understanding of the business disciplines.

Proposition 2: It will be found that after participation in the IBP, the mean grades of each subject (i.e. finance, management, and marketing) will be higher than the mean of non-participating students' grades (control group) for the same subjects that were taught by the same professors.

Proposition 3: It will be found that after participation in the IBP; the desire to take more integrated classes is preferred by participating students (the experimental group).

RESULTS

Grade Analysis

The statistical evaluation consisted of testing for differences between the mean grades expressed as a percent in each of the classes in the IBP compared to the mean grades in conventional courses for each discipline. Table 2 presents the sample sizes, means, and standard deviations for each class.

Two sets of tests were conducted assuming that the variances are unequal and then assuming the variances are equal. The p-values are shown in Tables 3 and 4. The p-value is the probability of obtaining a test statistic at least as extreme as the one that was actually observed, assuming that the null hypothesis is true. (Keller, 2011). Another definition is that the p-value describes the likelihood of observing certain data given that the null hypothesis is true (Wikipedia, n.d.) Another explanation is that the p-value measures the probability of finding a sample at least as far from the mean as the sample we have.

The higher the p-value, the higher the chances are that the data confirm the null hypothesis. The lower the p-value, the lower the chances are that the data confirm the null hypothesis.

The null hypothesis is that there is no difference between the grades. Therefore, a low p-value supports the conclusion that the data do not confirm the null hypothesis and that there is a significant difference between the two sets of grades.

Table 2: Students' Grades Comparison Per Academic Subject With IBP (N= 37)			
Academic Subject	**Sample Size**	**Mean**	**Standard Deviation**
Finance			
IBP	37	87.12	5.26
Fall, 2009	23	80.04	8.69
Spring, 2010	25	79.08	8.18
Total Non IBP/IBP	**48/37**		
Management			
IBP	12*	90.13	4.53
Winter, 2006	19	80.10	4.96
IBP			
Total Non IBP/IBP	**19/36**		
Marketing			
IBP	13	86.70	6.39
Spring, 2011 A	19	86.26	4.89
Spring, 2011 B	18	80.89	10.46
Total Non IBP/IBP	**37/37**		
*1 IBP student only audited the management class since said student had already fulfilled its requirements and passed it a one semester ago. That made the management's class size only 12.			

Table 3 presents the p-values of testing whether the differences between the mean grades are significant. In addition, the variances were assumed to be unequal.

Table 3: P Values of Students' Grades Per Academic Subject Within the IBP Assuming Unequal Variances	
Academic Subject	P Values*
Finance	
IBP and Fall, 2009	.0003130189
IBP and Spring, 2010	.000103887
Management	
IBP and Winter, 2006	1.66841 E-08
Marketing	
IBP and Spring, 2011 A	.776061565
IBP and Spring, 2011 B	.4062347
* Note: all values are significant at the 5% level.	

Table 4 presents the results assuming that the variances are equal.

Table 4: P Values of Students' Grades Per Academic Subject Within the IBP Assuming Equal Variances	
Academic Subject	P Values*
Finance	
IBP and Fall, 2009	.000223617
IBP and Spring, 2010	1.47469E-05
Management	
IBP and Winter, 2006	5.89407E-10
Marketing	
IBP and Spring, 2011 A	.793867844
IBP and Spring, 2011 B	.013612602
* Note: all values are significant at the 5% level.	

INTERPRETATION OF STATISTICAL RESULTS

The results support Proposition 2 that the grades in the IBP program are significantly higher than the grades in the conventional courses. There are four possible explanations for the statistical results shown above. The first is that the students were highly motivated to make their companies successful so they put aside any personality differences and performed as a cohesive group. The students spend extensive hours working together outside of class. This afforded them the opportunity for the stronger students to help the weaker students.

The second reason relates to the title of the program. The students were able to integrate the learning from the three courses so the students could identify the interrelationship of the three disciplines. This facilitated the learning in each discipline.

The third reason concerns motivation. Since the IBP program is voluntary, there is an element of self-selection. The students were made aware of the program by their advisers, but the decision to participate was theirs. This led to an enrollment of students who showed above-average motivation, effort, and commitment.

The fourth reason concerns faculty involvement. The commitment of the faculty to the success of the program may have led to a subconscious bias in awarding grades. However, weekly faculty meetings did not indicate such bias based on the individual comments of the faculty.

STUDENT REACTIONS

Content Analysis

The students were asked to write a one-page paper with reflections concerning outcomes and the positive and negative aspects of the program, as stated above. Using content analysis with involvement from the four participating professors, several themes emerged. The papers were read and coded individually by the professors, then, through several face-to-face conversations, the codes were aggregated into themes. Sample responses included in this paper have been reproduced verbatim.

Integration of Course Material and Real World Experience

A primary theme emerged supporting Proposition 1 because a positive relationship was found to exist between participation in the IBP and students' increased understanding of the business disciplines. All of the students discussed the advantages of having the course material integrated. They felt that they now understand how these disciplines work together within a business and they were not just memorizing content to get a good test grade. In the discussion, comments were also captured about the comparison of this course environment to traditional class delivery.

> *"It has truly made me see business as a whole. Even though someone just wants to get into finance, understanding within the different parts of business is absolutely crucial."*

> *"The overall integrated structure and professor coordination efforts have created stronger and more positive learning environments for students while reinforcing the course material through practice application."*

> *"The program was beneficial in the experience it gave. We learned marketing (target markets, advertising, and social media), finance, and management. We all had to figure things out together."*

"The integrated business program has more value to offer when compared to taking the same courses without coordinating professors. A course on its own would cause confusion because the core concepts would be introduced at different time periods."

Proposition 3 was also supported with statements from the students about the limitations of a typical class environment in comparison to the integrated approach.

"I can't imagine taking regular classes next semester."

"I strongly believe that I will see my future courses at [University] in a new light. I no longer will think, "What do I need to memorize/study to get an A on this test?", but rather, "How can I use this information in the world of business?"

"I was able to put the topics covered in class into action in real life."

"This program has been the highlight of my college career. I leaned so much through the hands-on experience and I feel that I can apply all that I've learned in this course to the real-world after I graduate."

In addition to the above supporting statements for Propositions 1 and 3, there were many other outcomes considered important to the participants as discussed below.

Collaboration and Conflict

All of the students had some comment about interaction with each other and how they worked together as a team. Their statements emphasized how much more important teamwork was in this program in comparison to a traditional course because it was a real-world environment. They had much more need to work together for the company to succeed and there could be no slackers. They discussed how they overcame many conflicts to evolve to a more collaborative environment. Understandably, initial conflicts occurred when choosing the product they would market.

Some comments were:

"With different personalities came different opinions and perspectives. Although our views may have clashed, each person's opinion was valuable in moving the company forward."

"There were times where people will butt heads with each other, especially when deciding on the product, however, we solved it in the practicum."

"We had long, long discussions throughout the semester to solve our problems, especially with product ideas, then the sales forecast. All opinions were valuable."

"I think we learned how to communicate with each other and really listen to everyone."

"Maybe we had disagreements with some teammates, but we moved on."

Shift in Group Dynamics

As might be expected in this type of immersed situation, group dynamics changed over the semester. To evolve from a group of people who did not know each other to a cohesive group, communication skills as discussed above were honed. All of the students discussed how the group changed over the semester.

"We moved from "I" to "We." We worked together on sales, for example. We didn't care about particular individual sales – we worked for the company."

"We found that we had to have discipline. With inventory management, I had a phone message every day asking them for their numbers. We all had to be responsible."

"We had to develop skills and we helped each other, for example, having to sell the product. We all had to do this, although I found this is probably not what I want to do."

"What we learned about teamwork helped me in the next semester. For example, I am able to delegate work much better and I understand the need to build relationships."

"Towards the end, I could really see our team come together as reflected in our sales."

Professional Communication Skills

All of the students discussed how the real-world experience of starting a business enhanced their professional communication skills in addition to inter-personal communication skills as discussed above. The most important presentation was to the bank to obtain a loan, using their business plan. Over the two semesters, the students also gave presentations to the President of the University, student groups, vendors, and classes. These presentations had significant performance pressure – more than the students had experienced previously.

"I have NEVER rehearsed so much for a presentation"

"Then there was the 'heart-stopper' presentation to the bank. We had to overcome fear."

"I learned how to communicate with the vendor one-on-one"

"I think having to go out and talk about our product and company was most difficult, but it helped me with my communication skills."

"It was interesting to learn how to develop a relationship with a vendor."

"As the semester went along, our communication improved as we learned how to manage others."

In summary, the analysis of student responses strongly supported propositions one and three and the students believed they could apply what they learned in future employment. Although there were suggestions for improvement in the course, which were welcomed, there are no students to date who indicated they would not recommend the course to others.

LIMITATIONS

This study contributes to the knowledge of the relationships between integrated courses (learning community) and students' knowledge gained in comparable independent courses. However, the study has some limitations. One limitation is that it has a small learners sample (i.e. n=37) and occurred within three semesters. This sample may not have been sufficiently large to generalize the results. Therefore, more students are needed to have a larger sample and observations should be extended to more than three terms (perhaps two or more years).

Another limitation of the study was that it used a sample of students who registered for one particular integrated course at the University. Therefore, the conclusions reached are not generalizable to the entire country, different countries, or to other academic institutions. Further research with a larger statistically random sample across the U.S. is required to assess the applicability of these findings to the general population of students who are actively engaged in community learning circles.

However, the researchers suggest that qualitative studies and structured interviews with focus groups of students and instructors should be continue to be conducted to examine the causal relationships between integrated courses and knowledge gained in comparable independent courses.

CONCLUSIONS

As discussed, at the end of the semester in which the first IBP was offered, the professors initiated an evaluation process consisting of the group of students orally discussing the course, as well as an individually written reflective paper. The initial intent of this student evaluation was to determine how to ameliorate the course for the next semester. However, the comments were overwhelmingly positive and other significant factors emerged, so the professors involved wanted to continue collecting comments over subsequent semesters and share the research with others who may be considering such a program.

In a meta-analysis of student evaluation literature, Clayson (2009) determined that student evaluations are not necessarily linked to what the student thinks he/she has learned as there are many situational factors involved such as nature of the course, personality of the professor, and the type of evaluative tool used. The advantage of the qualitative research format used in this study was that it allowed the students to express extemporaneously and openly what they felt they had learned (or not learned) in the IBP format. With this method, in-depth knowledge was gained concerning *why* they felt they had learned more in the IBP program, enhancing the literature on student evaluations linked to community learning programs, which has been previously lacking.

The authors determined through the statistical analysis of comparative grades and the content analysis of the students' comments, that the propositions were positively confirmed. The first proposition was:

> **Proposition 1:** *A positive relationship will be found to exist between participation in the IBP and students' increased understanding of the business disciplines.*

The content analysis confirmed that students fully understood the business topics and how they fit together. Most importantly, they felt they could apply principles and theories in a

real-world environment and they felt more comfortable about applying knowledge in an experiential way.

> ***Proposition 2:*** *It will be found that after participation in the IBP, the mean grades of each subject (i.e. finance, management, and marketing) will be higher than the mean of non-participating students' grades (control group) for the same subjects that were taught by the same professors.*

The quantitative analysis of grades comparing non-integrated to integrated courses established that grades were higher in the integrated course. Although the data are limited, this matches with the students' comments about recognizing that they had to use the material to run their business, not simply memorize it to gain a good grade on an exam or completed assignments.

> ***Proposition 3:*** *It will be found that after participation in the IBP; the desire to take more integrated classes is preferred by participating students (the experimental group).*

The student narratives also supported this proposition. The comments confirmed that they were not looking forward to future courses they had to take in a non-integrated format. They also discussed how much more knowledge was gained about business disciplines in the integrated program.

Some unexpected positive results also emerged from the content analysis. Students learned valuable lessons in collaboration and listening to teammates to ensure all ideas were considered. In addition to that, they also understood the value of discipline, commitment to implementation, and making changes as appropriate to achieve goals.

In conclusion, the program within this University has been deemed highly successful from students' perspectives and grade achievement. Although more research should be conducted, these authors posit that colleges should seriously discuss and consider such integrated programs to more explicitly connect with the needs of business. Current research of learning communities is limited and focuses on problematic issues such as faculty involvement and resources or positive strategic outcomes including retention and recruitment and not student outcomes. Therefore, from an academic perspective, these results contribute significantly to the research on assessment of integrated programs. Likewise, the study assists other universities considering the development of similar programs.

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AACSB ACCREDITED MBA PROGRAMS IN THE US: WHAT SCHOOLS COMMUNICATE ABOUT THE GRADUATE PROGRAMS IN THEIR WEBSITES

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ABSTRACT

The Master of Administration (MBA) degree is designed to provide key managerial competencies to students. Research revealed that returns on investment were up to 18%, even for graduates from programs not in the top-10 school rankings (Bruce, 2011). With the number of business students graduating with MBA degree reaching 156,000 (NumberOf.net, 2013), business schools try to differentiate by offering multiple graduate degrees. This research explored web sites of schools offering the US based AACSB accredited MBA programs. The content analysis compared and contrasted 285 school websites in 82 common variables. These variables can be classified under 10 categories. The most frequently included content to web sites was identified as Deans' welcome letters, about the program and accreditation. Results and implications for MBA programs were included.

INTRODUCTION

The Master of Business Administration (MBA) degree was developed in the United States in 1908 (Gupta, Smith, and Saunders, 2007) and has been the "must-have postgraduate business degree" since then (Naude, Henneberg, & Jiang, 2010). The number of MBA degrees granted in the USA was 5,000 in 1960 and 53,000 in 1980 (Murray, 1988). According to the National Center for Education Statistics (NCES), more than 156,000 students are graduating from MBA programs in the United States alone (NumberOf.net, 2013).

The global market for business schools has become increasingly crowded and challenging. Many types of schools are in those highly competitive marketplaces and marketspaces such as state schools, private non-profit schools and private for-profit schools at both national and regional levels. These schools can also be categorized into traditional, innovative, and entrepreneurial offering 2-year or 11-month on-ground (e.g., EMBA -Executive MBA, MSA - MS in Accountancy, PMBA - Professional MBA) and online programs (e.g., online MBA, virtual MBA, Web MBA, Distance MBA) (McDonald, Bocchi, & Gooding, 2004; Sharkey & Beeman, 2008; Cavico & Mujtaba, 2010). Shrinking state-government contributions,

decreasing private endowment revenues, limited doctoral faculty supply, and a recessionary economy make competing, or even surviving harder for schools in the long run (Cavico & Mujtaba, 2010). Besides globalization and increased competition, technological change seems to bring a severe challenge to traditional universities (Sharkey & Beeman, 2008). While major national universities enjoy the positive foundation of rankings, prestige, and reputation, regional universities rely on cost, convenience and accessibility instead (Sharkey & Beeman, 2008). In this competitive environment, business schools need to remember that "the most coveted asset for recruiters is business schools' ability to attract a select talent" (Salon, 2007, 232) and that all other attributes are desirable as long as they lead to desirable consequences for students and recruiting companies. Therefore, Dreher and Ryan (2002) suggest that rather than schools' creating artificial barriers, prospective students should be accepted into MBA programs as long as they are bright, enthusiastic and articulate even if they lack the required years of work experience. They support this conclusion with their findings from a sample of 1,018 MBA graduates indicating that work experience is not a determining factor for a successful career in terms of salary levels and number of promotions attained.

As competition has increased over time, universities have started offering not only general MBAs concentrating on all core areas of business, but also MBAs specializing in a number of functional areas (Gupta, Smith, & Saunders, 2007; Naude, Henneberg, & Jiang 2010), such as applied corporate finance, leadership, the environment, health care, project management, and arts administration (Gupta, Smith, & Saunders, 2007; Cavico & Mujtaba, 2010). Research confirms that MBA concentrations serve well in satisfying student needs, but the content analysis of 758 employment advertisements did not find any preferred or required concentration as qualification (Gupta, Smith, & Saunders, 2007).

While marketing helps differentiate the product/service offering, such as specific MBA programs, targeting desirable new customers, such as prospective MBA students, is also important (Beneke, 2011). Therefore, some schools offer programs/courses to non-traditional students, such as working professionals, at their convenience, in terms of not only times and locations but also delivery modes (e.g., online/distance) (Cavico & Mujtaba, 2010). Students from different geographical locations/countries may also have different needs in terms of specific knowledge areas. For example, Molinero and Potillo (2010) concluded that European students likely need consultancy, analysis, and communication skills, while Far Eastern students need applied knowledge industrial management, operations management, and marketing (Molinero & Portillo, 2010).

Rankings are widely used in selecting the right program; but schools with similar rankings are very different in terms of how they reach to the top according to Naude, Henneberg and Jiang (2010) in their analysis of *Financial Times'* ranking of 100 MBA programs. Accreditation, especially by AACSB, is widely perceived to be a true reflection of program quality. Common phrases for AACSB accreditation include the following: "brand enhancer," "gold seal," "hallmark," "must have," and "ticket to success" (Cavico & Mujtaba, 2010). While

AACSB accreditation in addition to regional accreditation is especially important for US schools, European MBA programs typically have multiple accreditations, such as the Association of MBAs (AMBA) in UK, to enhance a "global brand image" (Gopalan, Stitts, & Herring III, 2006; Molinero & Portillo, 2010).

Research suggests that an MBA's rate of return is high and that the demand for MBAs, on the part of recruiters and thus on the part of students, has increased and should continue to do so as the economy improves (Peterson, 2006). These factors increase the demand for MBA programs. With only few new U.S. schools accredited by AACSB (The Association to Advance Collegiate Schools of Business) each year, the students are competing for the limited business schools offering accredited MBA programs. This limitation pressures both the schools and the prospective students to reach for the best. The purpose of this study is to understand the factors behind selecting an MBA program at AACSB accredited graduate B-schools.

Adding to the pool of competitors is the undergraduate B-schools, which compete to send their graduates to top graduate schools. Thus, a new trend among rankers is to consider this factor in ranking undergraduate B-schools. For example, when ranking these schools, *BusinessWeek* uses its "storehouse of data to determine which schools sent the most students to the top MBA programs" (Lavelle, 2006).

While competition is growing, schools have been trying multiple strategies to stand out in an increasingly crowded market. The purpose of this study is to explore how graduate business schools communicate their MBA programs' features through their websites to prospective students. Specifically, it includes a content analysis comparing U.S.-based MBA programs in terms of such dimensions as program characteristics, quality, admission/administration, monetary factors, career services, student profiles, faculty profiles, university description, information links, and marketing details.

METHODOLOGY

The initial sample size at the time of data collection was 367 accredited business schools offering MBA programs. However, we ultimately reached 285 of them and collected reliable information from their web sites. The qualitative data influencing the program selection was collected from the homepages of universities' graduate school websites graduate schools, colleges of business, and deans' letters when available. The data collected was organized into a matrix format of 82 variables influencing program selection across all the graduate B-schools analyzed.

RESULTS

Among the items regarding MBA programs included on business colleges' web sites, the top-ten are as follows: Dean's welcome address (45.3%), program details (37.9%), accreditation

(34.7%), skills developed (32.6%), program objectives (30.9%), types of MBA programs (28.8%) flexibility (24.9%), faculty (23.9%), program length (23.5%), and prerequisites (19.6%). For a better understanding of the content, multiple items were combined in this study under common categories, such as university-related information, program quality, student characteristics, MBA program details, career services, admission/administration information, links for further information, activities related to program marketing, faculty information and monetary issues of programs.

In terms of the overall university information category, *flexibility* and *length* are the most frequently mentioned (24.9 and 23.5%, respectively), while *class size* is mentioned the least (Table 1) with only 10.5% of the MBA programs referring to this characteristic as can be seen in the Table 1.

Table 1: University						
Factors Mentioned	**Yes**	**%**	**No**	**%**	**Total**	**%**
Flexibility	71	24.9	214	75.1	285	100
Length	67	23.5	218	76.5	285	100
Characteristics	52	18.2	233	81.8	285	100
Class Size	30	10.5	255	89.5	285	100

Regarding the MBA program's quality (Table 2), many schools consider their *accreditation* (34.7%) synonymous with quality with *skills developed* closely following (32.6%). Topics such as *initiatives making the program stand out (11.2%)*, the *program's rank (10.9%)* and *facilities* are included on 9.1% of the websites. Such programs as *executive in residence* that signal quality are mentioned on only 6.7% of the AACSB-accredited MBA program websites. Other categories such as *accreditations*, *student/faculty ratio*, and *library information* are mentioned on less than 5% of websites.

Table 2: Quality						
Factors Mentioned	**Yes**	**%**	**No**	**%**	**Total**	**%**
Accreditation	99	34.7	186	65.3	285	100
Skills Developed	93	32.6	192	67.4	285	100
Initiatives	32	11.2	253	88.8	285	100
Rank	31	10.9	254	89.1	285	100
Facilities Available	26	9.1	259	90.9	285	100
Executive In Residence Program	19	6.7	266	93.3	285	100
Other Accreditation	13	4.6	272	95.4	285	100
Student Faculty Ratio	6	2.1	279	97.9	285	100
Library Facilities	2	0.7	283	99.3	285	100
Library	1	0.4	284	99.6	285	100
GMAC Council Member	1	0.4	284	99.6	285	100
Number of Books in Library	0	0	285	100	285	100

Characteristics of potential MBA students are covered in the student category, which includes such information as *target students (usually a generic referral)* (17.5%), fit for executives (8.4%), *student profile* (6.3%), and *diversity* (5.6%). On the other hand, less than 3%

of the programs mention critical information about students fit for the program (such as *work experience*, *average GMAT score*, *current students' strengths*, *GPA requirements*, *student classifications*, and *average age of the MBA student body*). (Table 3)

Table 3: Student						
Factors Mentioned	**Yes**	**%**	**No**	**%**	**Total**	**%**
Target Students	50	17.5	235	82.5	285	100
Fit For Executives	24	8.4	261	91.6	285	100
Student Profile	18	6.3	267	93.7	285	100
Diversity	16	5.6	269	94.4	285	100
Work Experience	8	2.8	277	97.2	285	100
Average GMAT Score	7	2.5	278	97.5	285	100
Student Strengths	5	1.8	280	98.2	285	100
GPA	5	1.8	280	98.2	285	100
Student Classification	5	1.8	280	98.2	285	100
Average Age	4	1.4	281	98.6	285	100

The category MBA program details, includes three frequently mentioned factors: *information about the program* (37.9%), *program objectives* (30.9%), and *types of MBA programs available* (28.8%) (Table 4). With 14 factors identified, this category is one of the most populous in this study. However, majority of items are mentioned below 20% of the schools. It seems that schools do not have clear ideas about what to mention regarding important details of their programs. Some mention courses available, some others describe the program structure. They even mention about the history of the MBA program. Little research will indicate how relevant all these information are to the needs of prospective and current MBA students.

Table 4: MBA Program						
Factors Mentioned	**Yes**	**%**	**No**	**%**	**Total**	**%**
About the Program	108	37.9	177	62.1	285	100
Program Objective	88	30.9	197	69.1	285	100
Types of MBA Program	82	28.8	203	71.2	285	100
Program Emphasis	55	19.3	230	80.7	285	100
Course Times	42	14.7	243	85.3	285	100
MBA Courses	37	13.0	248	87.0	285	100
Program Structure	32	11.2	253	88.8	285	100
Integrated MBA Program	26	9.1	259	90.9	285	100
Teaching Methods	20	7.0	265	93.0	285	100
Course	19	6.7	266	93.3	285	100
History of MBA Program	13	4.6	272	95.4	285	100
Degree	4	1.4	281	98.6	285	100
Short-term Courses	2	0.7	283	99.3	285	100
Study Tour	0	0	285	100	285	100

What schools do for their graduates is summarized in the career category. Even though this category is very important to potential candidates in selecting a school, very few websites include information regarding *career services* (6.7%) and *networking* (4.6%) (Table 5). *Networking links*, *networking companies*, *career service activities*, and *skills developed through career services* are seldom mentioned.

Table 5: Career						
Factors Mentioned	**Yes**	**%**	**No**	**%**	**Total**	**%**
Career Services	19	6.7	266	93.3	285	100
Networking	13	4.6	272	95.4	285	100
Placement	4	1.4	281	98.6	285	100
Networking Links	3	1.1	282	98.9	285	100
Networking Companies	2	0.7	283	99.3	285	100
Career Service Activities	2	0.7	283	99.3	285	100
Skills Developed Through Career Services	1	0.4	284	99.6	285	100
Salary Information	1	0.7	283	99.3	285	100
Facilities Available in Career Center	0	0.0	285	100	285	100

Interestingly, the admissions/administrative information category is the most frequently mentioned with 14 factors, including the *dean's welcome address* (45.3%), *prerequisites* (19.6%), and *admission requirements* (13%) (Table 6). Some of the websites also provide *admission procedures* (6.7%) and information about *prerequisite waivers* (6.7%). However, very few programs provide an *online application link* (2.8%), *application deadline* (2.8%), and *admission policy* (2.5%).

Table 6: Admission/Administrative						
Factors Mentioned	**Yes**	**%**	**No**	**%**	**Total**	**%**
Dean's Welcome Address	129	45.3	156	54.7	285	100
Prerequisites	56	19.6	229	80.4	285	100
Admission Requirements	37	13.0	248	87.0	285	100
Admission Procedure	19	6.7	266	93.3	285	100
Prerequisites Waivers	19	6.7	266	93.3	285	100
University Policy	16	5.6	269	94.4	285	100
Advising	10	3.5	275	96.5	285	100
Online Application Link	8	2.8	277	97.2	285	100
Application Deadline	8	2.8	277	97.2	285	100
Admission Policy	7	2.5	278	97.5	285	100
Alternate Method of Applying	2	0.7	283	99.3	285	100
GMAT Waiver	2	0.7	283	99.3	285	100
TOEFL	1	0.4	284	99.6	285	100
Online Available	0	0.0	285	100	285	100

The information link category covers items related to the ease of contact with the MBA program's executives. Service organizations' websites usually designate special areas for contact information. *Contact information* is the most frequently shared factor. However, other links regarding *information requests* and *driving directions* are found on less than 2% of the websites. This may be because university web sites usually provide contact information and campus tours for undergraduate programs' applicants. (Table 7)

Less than 20% of the business schools in this study engage in marketing activities. In this category, some schools provide an *introductory statement* (16.1%) and *information about recent events* (10.2%). Some include *attention attracting statements* (9.8%) that can be considered slogans. Interestingly, only 4.4% of the schools mentioned *benefits of MBA* on their websites. (Table 8)

Table 7: Information Link						
Factors Mentioned	**Yes**	**%**	**No**	**%**	**Total**	**%**
Contact Information	55	19.3	230	80.7	285	100
Various Links	27	9.5	258	90.5	285	100
Link to More Information	9	3.2	276	96.8	285	100
Affiliation Agreement	7	2.5	278	97.5	285	100
Request Information	7	2.5	278	97.5	285	100
GMAT Link	6	2.1	279	97.9	285	100
Other html Tabs	6	2.1	279	97.9	285	100
Branch Location Information	5	1.8	280	98.2	285	100
Driving Direction/Accommodation Link	2	0.7	283	99.3	285	100

Table 8: Marketing						
Factors Mentioned	**Yes**	**%**	**No**	**%**	**Total**	**%**
Introductory Statement	46	16.1	239	83.9	285	100
New Events	29	10.2	256	89.8	285	100
Attention Attracting Statements	28	9.8	257	90.2	285	100
Caption	23	8.1	262	91.9	285	100
Benefits MBA	12	4.2	273	95.8	285	100

The faculty category includes the key personnel delivering the MBA education. (Table 9) One expects programs to advertise MBA faculty and their achievements. However, information about faculty is provided on only one out of every four schools' web sites. Often faculty members do not have web sites in their college of business web sites or do not provide links to their personal web sites. Faculty *credentials* and *names* are rarely mentioned.

In terms of the monetary issues category, *financial aid information* is the most frequently shared (9.1%) followed by *tuition* (6.3%). However, because regional universities try to compete based on cost, convenience, and accessibility (Sharkey & Beeman, 2008); one would expect all of them to provide key information about tuition and financial aid.

Table 9: Faculty						
Factors Mentioned	**Yes**	**%**	**No**	**%**	**Total**	**%**
About Faculty	68	23.9	217	76.1	285	100
Faculty Credentials	12	4.2	273	95.8	285	100
Faculty Names	3	1.1	282	98.9	285	100

Table 10: Monetary Issues						
Factors Mentioned	**Yes**	**%**	**No**	**%**	**Total**	**%**
Financial Aid Information	26	9.1	259	93.7	285	100
Tuition	18	6.3	267	93.7	285	100
Endowment	2	0.7	283	99.3	285	100

CONCLUSIONS

This study was an exploratory investigation of the information business schools share on their websites for prospective students. In contrast to expectations, research findings show that many seemingly important factors are not mentioned on AACSB-accredited MBA programs' websites. One reason could be business schools might prefer not providing information that appears on the general university web site for prospective graduate students. However, it seems

logical to assume that a prospective MBA student would go directly to a business school's web site to research information about an MBA program in one place rather than visiting multiple links throughout a university's web site. On the other hand, the lack of admissions policy details and a designated link might be because graduate schools, not colleges of business, usually manage these details. However, a direct link to key admission information would reduce the time spent searching; be convenient; and, therefore, be highly appreciated. Furthermore, researchers frequently observed a lack of synchronized linkage among university, school of business and MBA programs. Finally, information relevant to diverse potential MBA students is scarce and difficult to find.

As literature indicated, business schools' ability to attract students with "select talent" (Safon, 2007, 232) was identified as the most important success factor for national and regional MBA programs. However, few of the business schools mention characteristics differentiating the quality of programs. In addition, they neither identify their target markets nor communicate effectively the value they provide prospective MBA students.

Business schools, on the other hand, provide numerous details about their programs' technical attributes. Because these details are important, links to the programs' benefits should be more visible by connecting MBAs' differentiating characteristics of quality with students' expectations.

This research identified an information gap about networking services offered to MBA graduates. Schools either do not pay enough attention to networking activities or do not adequately refer to them. Students may not have accurate information about their chances of building strong networks after graduation. Therefore, they may infer networking chances from the rank, prestige and reputation of national universities. Sharkey and Beeman (2008) also mentioned students interest on these characteristics of universities naturally result in networking opportunities among graduates.

This study provided a glimpse of MBA programs' supply side by investigating business school websites. Apparently, MBA programs can benefit learning from student needs and expectations. Future research avenues may include detailed investigations into the demand side of MBA programs by studying perspectives of students in selecting the right program for them, as well as their experiences during and after completing the program. In a continuously changing business environment, MBA programs have to review their offering and reinvent programs based on inputs from all stakeholders.

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RECENT BUSINESS DOCTORATES' TEACHER TRAINING AND PERCEPTIONS OF THEIR PREPAREDNESS TO TEACH BUSINESS COURSES

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ABSTRACT

With higher education currently facing further budget cuts in many states, teacher effectiveness continues to be crucial in a realm of potentially increased workloads with restricted resources. This study examines business teacher training from the standpoint of those who earned a broad-based business doctorate within the last 2-12 years and are currently teaching college or university business courses. Respondents indicated 75% held teaching responsibilities in their doctoral programs, with 24% who took a for-credit graduate class on teaching skills development, and 22% who took a similar non-credit class. Those who took a credit class were statistically more confident on their preparation to teach than those who took a non-credit class. There was no statistical difference in those who took a non-credit class and those with no teacher training at all. Also, non-native English speakers statistically had more confidence on their preparation to teach than native speakers. Overall, recent business doctorates thought they were quite well prepared to teach business, believe students rate their teaching skills as very good, and believe they are very enthusiastic about teaching. Lastly, older (pre-1998) graduates took far less for-credit or non-credit courses in teacher training during their doctoral programs than recent graduates and thought their credit course in particular was more helpful than did recent graduates.

INTRODUCTION

The current state of higher education is in a difficult position with states facing cuts in the millions of dollars for the foreseeable future, coupled with the continuing task of ensuring quality education for millions of postsecondary students across the United States. For the current year, most states were forced to cut funds again for higher education, which seems to be a continuance of previous trends, as Pulley (2012) revealed that "between 2005 and 2010, 30 states reduced higher education appropriations" (p. 18). Examples include Wisconsin, which planned

to cut $250 million from the UW system for 2012-2013, and California, which cut $1.4 billion in 2012 for UC and Cal State schools, which comes directly after a $695 million cut was planned in 2011 for California community colleges (p. 17). Of course, these cuts are present in public universities, but the trend is seeping into private universities; for example, Iowa recently cut $4.8 million in private college tuition grants (Schettler, 2010); also, the large Texas Grant program, which can fund either public or private institutions, planned to be slashed in half (Parker, 2012).

With public institutions of higher education especially cutting budgets as much as possible before reaching the elimination of personnel, many public colleges and universities now must turn to the difficult task of cutting faculty and staff positions. These lean circumstances and a recession which has brought many students back to postsecondary study make it imperative that professors are able to manage higher class enrollments due to staff cuts, and administrative tasks linked with accreditation and other duties, along with the core focus on research and service.

Of course, teaching at the postsecondary level is just one aspect of the job. Boya and Robicheaux (1992) surveyed over 600 faculty members in marketing to find that faculty members' views placed research as the most important, followed by teaching in second place, then service, and then consulting regarding areas of importance in their careers. However, these marketing professors did confirm that they spent the most amount of time engaged in teaching responsibilities. This movement away from teaching to greater research has long been documented (Boyer, 1990; Anderson, 1992)

How prepared college and university teachers are for handling larger enrollments and expanding duties is a subject of concern particularly in the field of business, as many new business school graduates trained by business teachers will soon inherit the task of dealing in the public and private sector with an ongoing recession. This paper attempts to shed some light on the amount of formal training and experience to teach that those who recently earned a broad-based business doctorate degree obtained, and their perceptions of how they are faring in their teaching duties.

It was hypothesized that many of these relatively newer doctorates had graduate teaching assistantships when completing their DBAs and PhDs. However, research is scant on how much formal training professors received to teach at the collegiate level, or how much experience they gained before taking their first teaching post after leaving the doctoral institution. The literature could also be augmented by greater insight into professors' holistic perceptions of the quality of their teaching skills.

Therefore, the purpose of the study was to determine business professors' levels of preparation to teach business courses at the collegiate level. More specifically, the major research questions of the study were: 1) What forms of formal teacher training were received during the business doctoral program?, 2) What are teachers' perceptions of this teacher training provided at the doctoral level?, 3) What are perceptions of preparedness to teach upon leaving the doctoral program, 4) What are teachers' perceptions of how students rate their skills in the

classroom?, and 5) Did older (pre-1998) doctoral graduates have any differences in their teacher training experience than more recent graduates?

LITERATURE REVIEW

Much research involving quality of teaching in business subjects at the postsecondary level revolves around student perceptions, with scarce literature covering teachers' formal training to teach and perceptions of their own skills and abilities in the classroom. Not surprisingly, researchers have noted that many other factors than teaching ability were determinants of students' views of instructor skill, including biases relating to age, gender, major, and many more factors (Sprinkel, 2008; Lammers, Kiesler, Curren, Cours, & Connett, 2005; Ulrich, 2005; Whitworth, Price, & Randall, 2002). It has also been asserted that students' views of how "easy" or "hard" the professor is when grading has a large influence on student views of quality (Boysen, 2008; Boling, 2008; Addison, Best, & Warrington, 2006), though students really do believe that doing teacher evaluations improves the instructor's teaching of the course (Chen, Gupta, & Hoshower, 2004).

In the business and science classrooms, factors such as "knowledgeable in subject," "easy to understand," and "enthusiastic" ranked near the top in importance; "dress," "have a doctorate degree," and "humor" were at the bottom in a list of 14 factors which have the greatest impact on student perceptions of teaching effectiveness (Ahmad & Bahi, 2010). Student ratings of the high importance of teacher knowledge, clarity, and enthusiasm is certainly not new, as backed up by Feldman (1976). However, Porter and McKibben (1988) have lauded the importance of having a doctorate degree for the benefit of students, despite an ongoing discussion at the current time of the rise of the executive teacher and more practitioners teaching in the classroom with PQ status for purposes of AACSB (Porter & McKibben, 1988; Clinebell & Clinebell, 2008; Trank & Rynes, 2003).

The large amount of executive teachers as well as graduate assistants seems to magnify the call for more instruction of teachers on goals and performance measures for the classroom. In fact, formal training for graduate teaching assistants (GTAs) has not been around that long. "Universitywide [sic] GTA instruction programs began to develop in the early 1980s" (Butler, Laumer, & Moore, 1994, p. 15). University administrators surveyed 25 years ago claimed that 33% of their graduate teaching assistants were not formally made aware of any mission regarding teaching, nor were any teaching goals shared with them (Burkholder & Stevens, 1987).

In a 1992 study of doctoral business schools as identified by the AACSB directory, 26% revealed that they had no formal teacher training for graduate teaching assistants. However, 62% of these same GTAs claimed they were made aware of the teaching mission, 62% again got "relevant information" about syllabus construction, and 60% "were provided with relevant information" regarding lecturing and leading class discussions (Butler, Laumer, & Moore, 1994).

The study never really identified exactly how formal the information actually was, though, and from what level it came.

In specific business disciplines, economics and marketing are some of the few fields that have seen recent research conducted to determine information about teacher training for professors. McCoy and Milkman (2010) surveyed over 100 economics professors who earned Ph.D.s since the year 2000 to find that 96% had teaching responsibilities while earning their doctorate in economics and taught a substantial mix of both stand-alone courses and recitation sections. However, only 12% of those professors had taken a formal for-credit course on teaching methods and most of those were required to do so. These findings regarding formal training to teach economics is very consistent with Walstad and Becker (2003). Further, the average teacher responded favorably on how prepared he or she felt to teach at the completion of the doctoral program (mean of 3.84 on a 5.0 scale). When asked how their current students rate their teaching, the response was very favorable, with 4.49 on a 5.0 scale.

Marketing professors indicated that during their doctoral work, 87% taught a course as a graduate assistant, and 58% had a course at the doctoral institution that prepared them to teach the course (of that percentage, 31% took the course for credit) (Johnston, Milkman, & McCoy, 2012). Griffith (1997) found that 75% of marketing doctorates taught a class during their doctoral programs, and 52% had formal training to aid in teaching their course(s).

Teacher training is becoming a larger issue, as some universities are increasing the numbers of teaching assistants for a variety of reasons (June, 2011). In the years to come, it seems that a potential avenue for exploration is greater faculty development programs on campus to assist faculty in working more efficiently (Camblin & Steger, 2000; Ginsberg, 2010). Of course, these programs require money, which, as previously briefly examined, is in short supply in higher education at the current time. Another avenue is through such programs as AACSB's Bridge Program, which trains non-business faculty to teach in the business disciplines (Mangan, 2007). Most of these programs are in response to a faculty shortage in business subjects at the university level.

Obviously, teacher training is a very important issue in academia, especially in light of teacher shortages. Those with DBAs and comparable doctorates, such as a Ph.D in business education, often teach college and university-level courses that range from lower-level general business courses to graduate courses in specific disciplines, as determined by the particular university. The following section describes the methodology to gain insight from these business doctorates on their experiences with teacher training when earning their doctorates.

METHODOLOGY

To explore how fairly recent business doctorates feel about the pedagogical training they may have received during their doctoral programs, a survey was prepared and sent via email. The population was identified by the webpages of Colleges of Business throughout the United

States, both public and private, using the University of Texas at Austin's website (http://www.utexas.edu/world/univ/state/) of colleges and universities by state as a guide.

Only professors claiming to have earned a DBA, a Ph.D. in Business Education (or an Ed.D.), or the more rare Ph.D. in Business Administration with no linked specific business discipline during or after year 1998 on their faculty web profile were identified to receive the survey. The population was delimited to contain only those with current teaching jobs at colleges or universities in the United States. Using these criteria, the original mailing list contained 511 usable email addresses. A link to the online survey was sent via email to the 511 potential participants.

Some of these emails bounced back due to dated information on webpages or automatic responses were received that indicated the recipient was not available at this time. Invalid addresses were investigated and attempts were made to find valid addresses. Invalid and discarded e-mail addresses, indisposed faculty, or those who filled in the survey but were revealed to have doctorates earned before the year 1998, were removed to bring the accessible number in the population to 451. Two weeks after the original e-mail was sent, a follow-up e-mail was sent to encourage non-respondents to complete the survey. As a result of these efforts, usable responses were received from a total of 84 people, a response rate of about 18.6% from the targeted sample. There were no statistically significant differences in these first 20 who completed the survey and the last 20 to complete the survey on any factor subsequently discussed.

DESCRIPTION OF RESPONDENTS

A list of the different doctoral degree granting institutions of respondents along with the number of respondents with a degree from each school is listed in Appendix A. When viewing this listing, the most popular schools for receiving a DBA, Ph.D. in Business Education, or Ed.D. became quite apparent, as every research university does not offer such a degree. Regarding the type of doctorate earned, 37 earned either Ph.D.s in Business Education or Business Administration, 35 earned DBAs, and 5 with Ed.D.s with a specialty in business education. Five also chose not to answer the question. Demographic information regarding respondents included 40.0% women, 60.0% men, and 9.7% non-native speakers.

Of respondents, 75% held teaching responsibilities during their doctoral programs and exactly 79% are currently in a tenure track position or have tenure. Respondents are spending an average of 64.2% of their time teaching in their current position in relation to other duties; however, in mixing with these results, three respondents indicated a deanship, department chair duties, or MBA coordinator duties.

It is also worthy to note that most doctoral graduates in the sample graduated from public universities, with only a minimal number of private universities represented on the list of

institutions. No statistically significant differences were found, however, using Mann-Whitney, on any aspect of the study between public and private school graduates.

FINDINGS REGARDING TEACHER TRAINING OF RECENT DOCTORATES

Again, 75% of respondents reported having teaching responsibilities during their doctoral program; thus, it appears that use of graduate students in teaching remains widespread. Those teaching standalone courses taught on average 7.54 such courses cumulatively during the length of their full program, with one of the more extreme cases augmenting the question with the comment that he/she taught two sections per semester over 7 years. Overall, 47% with DBAs and similar doctorates who taught a standalone course during their doctoral programs had any formal teacher preparation training (for either credit or non-credit).

CREDIT COURSE TEACHER TRAINING

Of the respondents, 24% (20) indicated that they had taken a graduate credit course on undergraduate teaching. Of those 20 respondents, 14 took the course because it was required for those assigned teaching responsibilities in their departments. Two popular answers represented 71% of the response, with the majority (47%) indicating the course was three hours in one semester with another 24% indicating that the course was only one hour of credit in one semester. Overall, these credit courses averaged 2.55 credit hours.

Regarding who taught the for-credit class on teaching instruction to the doctoral students, results stood at exactly 37% for both "a faculty member from within your own department" and "a faculty member from another department within your college," with another 21% being a "faculty member from another college."

Table 1	
How well did the graduate credit course on teacher training prepare you for teaching?	
Very Well	36.8% (7)
Well	15.8% (3)
Adequately	36.8% (7)
Poorly	10.5% (2)
Very Poorly	0% (0)

Respondents were also asked to rate "How well this graduate credit course prepared you for teaching," which is shown in Table 1. Subjects who responded "well" or "very well" consisted of 52.6% of respondents, 36.8% responded "adequately," 10.5% responded "poorly,"

and none said "very poorly." On a five point scale with "very well" as best, the average rating of these respondents to this question was 3.79.

NON-CREDIT TEACHER TRAINING

McCoy and Milkman's (2010) survey of recent economics doctorates, which found that a large number (34%) of respondents had attended a non-credit program on teaching during their undergraduate programs, was similar to the findings of this study with recent broad-based general business doctorates. Specifically, 22% (16) of respondents attended such a non-credit program, for 10 of whom the program was required for those teaching for the department. It should be noted that only 16 respondents answered this question due to the larger number who took a for-credit course as opposed to a non-credit course. However, it is interesting to note that only two respondents attended both a required course on teaching and non-credit elective training because they wanted even more instruction in being an effective teacher.

The non-credit programs attended by respondents averaged about 14 total contact hours, with a range of 6 contact hours and a maximum of 48 contact hours. Who taught these no-credit courses was split between "faculty in the department" (19%), "faculty members from other departments" (50%), "faculty from another college" (37.5%) and "non-faculty staff members" (19%).

Respondents who attended a non-credit teacher preparation program were also asked to rate "How well this graduate non-credit course prepared you for teaching," shown in Table 2.

Table 2	
How well did the graduate non-credit course on teacher training prepare you for teaching?	
Very Well	25.0% (4)
Well	6.2% (1)
Adequately	37.5% (6)
Poorly	18.7% (3)
Very Poorly	12.5% (2)

In response, 25% responded "very well," 6.2% responded "well," 37.5% responded "adequately," 18.7 responded "poorly," and 12.5% indicated "very poorly." Again, on a five point scale with "very well" (5.0) being top, the average rating of these respondents to this question concerning non-credit preparation was 3.13 (of 5.0), which was lower than the average response to the same question concerning credit courses.

Overall, 47% with DBAs and similar doctorates who taught a standalone course during their doctoral programs had any formal teacher preparation training (for credit or non-credit). However, the percentage of those for whom English is not the first language and who received

teacher training in some form was much higher than the norm, with only three of these respondents who did not attend either a credit or non-credit teacher training course during their doctoral program.

All respondents were next asked "Overall, how well prepared for teaching were you at the completion of your doctoral program?" Again using the same 5-point scale described above, 45.0% responded "very well," 18.3% responded "well," 18.3% responded "adequately," 12.7% "poorly," and 5.6% "very poorly," for an average response of 3.80 (out of 5.0), as shown in Table 3.

Table 3	
Overall, how well prepared for teaching were you at the completion of your doctoral program?	
Very Well	45.0% (32)
Well	18.3% (13)
Adequately	18.3% (13)
Poorly	12.7% (9)
Very Poorly	5.6% (4)

RECENT GRADUATES' PERCEPTIONS OF PREPAREDNESS TO TEACH: CREDIT COURSE VS. NON-CREDIT COURSE VS. NO TRAINING

On a 1-5 scale, with 5 being "very well prepared" and 1 as "very poorly prepared," recent graduates were asked "How well prepared for teaching were you at the completion of your doctoral program?" Those with any type of formal teacher training at all (credit or non-credit) had a mean of 4.14 (which equates to they thought they were "well" prepared), compared to 3.62 of those with no training at all, which reached statistical significance through the Mann-Whitney non-parametric test ($p=0.03$).

Also, regarding opinions of how prepared to teach doctoral graduates were upon completion of the program, the mean response of those who had attended a course for credit was 4.33 (just above "well" at 4.0), and for those only attending the non-credit class, the mean was 3.86, which was marginally statistically significant using .05 alpha (at $p=0.05$). However, there was no statistical difference on the question of preparedness to teach between those who took a non-credit class on teaching methods versus those with no training at all.

Very interestingly, there was statistically significant difference between native and non-native English speakers in that those with English as a second language were much more confident about their preparation to teach than native speakers ($p=0.0009$) upon leaving the doctoral program. There were no statistically significant differences in the mean numerical responses from the two groups (5.0 being best) based on gender or age (age was simplified into two groups--under 40 versus 40+) regarding confidence in teaching ability upon graduation from the doctoral program. The Mann-Whitney test was again used for both gender and age.

INSTRUCTOR PERCEPTIONS OF EFFECTIVENESS AND ENTHUSIASM

We also asked respondents to self-report how students rate them as a college/university teacher (Table 4). Sixty-three percent of respondents indicated that their students rate them as "very good," 32.3% indicated "good," and only 4.2% indicated "adequate," which is almost identical to the study completed in economics by McCoy and Milkman (2010). No one indicated that their students rate them as "poor" or "very poor," for a very confident overall mean response of 4.58 (again, based upon 5.0="very good").

Table 4	
How do students rate you as a college/university teacher?	
Very Good	63.4% (45)
Good	32.3% (23)
Adequate	4.2% (3)
Poor	0.0% (0)
Very Poor	0.0% (0)

Regarding "how do students rate you as a college/university teacher?," responses of those who had completed a credit course averaged 4.47, while those who had completed a non-credit course averaged 4.53 and those who had completed neither averaged 4.65. There were no statistical differences between those who had a credit course, had a non-credit course, or did not have any course at all on the factor of current student evaluations of teacher effectiveness. No statistically significant differences were found through Mann-Whitney in the two average numbers between the responses of males and females, different ages (grouped by under 40 versus 40+), nor non-native and native speakers. However, overall, when asked to rate themselves as a teacher, the average response was just a touch lower (4.54) from how teachers claim their students rate them, but without a statistically significant difference.

Respondents were then asked to self-rate their enthusiasm for teaching, as Ahmad and Bahi (2010) determined this was a major factor in student perceptions of learning. As shown in Table 5, about 75% of respondents indicated that they are "very enthusiastic," 22% indicated "enthusiastic," and 2.7% said they are "indifferent," with no teacher admitting to being "unenthusiastic" about teaching.

Table 5	
How do you rate yourself on enthusiasm as a college/university teacher?	
Very enthusiastic	75.3% (55)
Enthusiastic	21.9% (16)
Indifferent	2.7% (2)
Unenthusiastic	0.0% (0)

The average response out of 5.0 ("very well") on the question of instructor enthusiasm was 4.72. The responses of those respondents who had completed a credit course averaged 4.70, while those who had completed a non-credit course averaged 4.76 and those who had completed neither averaged 4.67. These numbers did not merit statistical significance between the groups of business teachers with for-credit training, no-credit training, or no training on the aspect of instructor enthusiasm. There were no statistically significant differences between genders, ages (again divided into two ago groups at age 40), nor native/non-native English speakers.

The survey concluded with the open ended prompt "If you have any additional comments covering the teaching preparation you received during your doctoral program, please provide them." Appendix B contains randomly selected open-ended comments, of which some are quite helpful to those currently teaching. The comments can be categorized in several specific categories: 1) Comments about teachers' particular situations regarding teacher training at their doctoral institutions, 2) Information about the value of gaining teaching experience, and 3) Lessons learned.

COMPARISON OF RECENT AND OLDER GRADUATES' PERCEPTIONS OF TEACHER TRAINING

Of those in the entire sample who had a for-credit class on teacher training in their doctoral program, 75% were indeed recent (post-1998) graduates. Likewise, 77% of those who had a non-credit class were also recent graduates.

In a comparison of recent and older (pre-1998) graduates about perceptions of training to teach in their doctoral program, interestingly, there was no statistically significant difference in how well prepared all graduates thought they were to begin teaching after the completion of their doctorate. The recent graduates' mean was 3.85 regarding how prepared they thought they were (on a scale of 5.0=very prepared to teach), and the mean for the older graduates was 3.68. This is an interesting result considering that the recent graduates had a much higher number of people who completed both for-credit and non-credit courses than the older graduates.

When examining the credit graduate class on its effectiveness, there was a statistical difference between recent and older graduates (p=0.000982) on how well the credit course helped prepare them to teach. Older graduates thought their course was more useful, with a mean of a perfect 5.0 (5.0=very well prepared) as opposed to the recent graduates (3.79). When also considering non-credit courses taken by older and recent graduates, there was no statistically significant difference between recent and older gradate opinions on how well the non-credit course helped them prepare to teach.

Indeed, besides the difference found in the opinion of the for-credit graduate class, there was no statistically significant difference in older and recent graduate opinions on any other question regarding teacher training that was asked. Regarding the overall feeling of preparedness to teach upon exiting the doctoral program, the recent graduate mean was 3.80 (of a

best 5.0), and the mean for older graduates was 3.68. Thus, both sets of graduates felt prepared to teach.

There also was no statistical difference between older and more recent graduates on a self-report of how students currently rate them (recent=4.58, older=4.66), how teachers rate themselves (recent=4.54, older=4.63), and their own views of their enthusiasm in the classroom (recent=4.72, older=4.76).

CONCLUSIONS AND IMPLICATIONS FOR FURTHER RESEARCH

While the use of doctoral students for teaching at the larger doctoral universities remains widespread, the provision of formal instructional training to these students during their doctoral programs, either for credit or non-credit, is much less widespread. Only about half (47%) of respondents who taught a stand-alone course during their doctoral programs had any teacher preparation training (for either credit or non-credit). There were 21% who also did not teach a course at all as a graduate assistant and therefore had little teacher training.

Those who did attend training during their doctoral programs generally felt that it prepared them for teaching, and had a higher opinion, no altogether surprising, of the for-credit training instead of the non-credit teacher training they received. However, as a general rule, respondents felt that they were quite well prepared for teaching at the completion of their doctoral programs. A statistically significant difference was found in the responses of those who had completed formal pedagogical training during their doctoral programs and those who did not, regarding the issue of teachers' perceptions of their preparedness to teach upon doctoral graduation. However, whatever the opinions regarding the quality of teaching instruction they received in their doctoral programs, instructors subsequently become very confident on the job as almost all listed that they currently get good student evaluations and that they are still enthusiastic about teaching.

Since the study revealed the overwhelming majority of teachers thought they were well prepared to teach, despite year of doctoral graduation, an interesting supplemental finding revolves around why the older doctoral graduates (pre-1998) thought their credit graduate class was more useful than did the recent graduates (post-1998). The study, however, showed that older and recent doctoral graduates were almost identical in their opinions that they currently get good student ratings in the classroom, personally think they are good teachers, and also personally think they are enthusiastic in the classroom.

In conclusion, the researchers recognize that given the nature of this target population, and the smaller sample size, the results of this survey may not reflect what is currently occurring in doctoral programs, but is more likely to reflect what was occurring somewhere between 2-12 years ago. Further research in this area of teacher training for business doctorates includes: 1) Survey a larger sample size. Teachers with doctorates who instruct students on foundations of business and business education are very difficult to locate. There is no directory associated with

professional organizations that helps to reach such broad-based business doctorates who are laying the foundation of business knowledge in colleges and universities before students go on to higher-level classes or specific majors in such areas as accounting or HR management; 2) Perform an identification of exemplary programs and a case study of these programs to identify best practices would be helpful for further research in this area. This research would assist universities in enhancing their training programs and might also give universities that do not have teacher training programs for their teaching assistants some guidance in establishing these programs; 3) Survey those business doctorates who have graduated from international universities with a doctorate and perhaps teach in the United States, which would certainly help domestic and international teacher training programs alike in a comparison of practices.

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APPENDIX A

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Table 6
Institutions Where Doctorate Earned

Louisiana Tech University (8)
Mississippi State University (6)
Argosy University (5)
New Mexico State (5)
Southern Illinois University – Carbondale (5)
University of Memphis (3)
University of South Florida (3)
Boston University (2)
Cleveland State University (2)
Florida State University (2)
Kent State University (2)
SUNY at Buffalo (2)
Temple University (2)
University of Chicago (2)
University of Illinois Urbana – Champaign (2)
University of Kentucky (2)
Arizona State University
Ball State University
Duke University
Golden Gate University
Harvard University
Indiana University
Kansas State University
Kennesaw State University
McGill University
Northern Illinois University
Nova Southeastern University
New York University
Rutgers University
University of Arkansas
University of California – Berkeley
University of California – Irvine
University of Cincinnati
University of Maryland
University of Massachusetts – Amherst
University of Massachusetts – Lowell
University of Missouri

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University of Nebraska – Lincoln
University of North Carolina – Chapel Hill
University of Oregon
University of South Carolina
University of Southern Mississippi
University of St. Gallen (Switzerland)
University of Tennessee
Wayne State University

APPENDIX B

Table 7
Selected Comments from Respondents

I taught full time at the 4-year level for two years prior to entering a PhD program and had some good training prior to the PhD program. As such I was pretty prepared prior to the PhD program, and the AZ St Univ non-credit program was optional for me, but did it anyway.

Since MSU had the lowest completion rate in the nation for those who enrolled in the doctoral program, the program was completely revamped one year after I graduated. I heard that the teacher training component of the doctoral program was significantly beefed up.

My program was 1/3 business management, business writing and leadership, 1/3 counseling and 1/3 education-related courses. This combination worked well with my grad MBA and other grad level education courses realted [sic] to the business and healthcare majors in which I teach.

The doctoral program I graduated from was sub-standard. I asked two faculty members for advice on classroom management and they couldn't give me coherent answers. I think public speaking skills translate well into the classroom. The time I had to spend learning these skills and classroom management has reduced my research time and output.

We were encouraged to ask questions of the professors about how to teach or basic questions we might have about the material. It was a very fostering environment.

Given that the vast majority of doctoral graduates will work in teaching dominated institutions, it was a crime I received no teaching training, education or mentoring. This caused me endless trouble. I fumbled and groped around but never felt satisfied with what I was doing. It was not until I took the initiative (through a course I took at a College of Education) that I even realized that were journals in teaching in business and in statistics!!!

We do not have a formal teacher preparation program for the B-School and this is a problem. I only received teacher training because I received my doctorate from the Graduate School of Education.

The best preparation is to get in the classroom. Teaching is sink or swim. If you can swim, then you reflect. There is no perfect way to teach. Teaching training course seem to present the notion that there is.....bad idea!

We had the opportunity to teach undergrads and MBA students, but I didn't take advantage, as I was already teaching FT at a nearby institution.

I did not have any preparation for teaching in the course work in the program.

Note: I had no teaching prep during my doctoral program. However, I had taught for 15 or so years before that, so my doctoral program had no effect whatsoever on my teaching methods or ability.

Seminar led by an outstanding professor (won numerous teaching awards). In the beginning of the semester it covered things like how to write a syllabus. Later in the semester it was mostly discussion about our experiences in the classroom & brainstorming on how to handle challenges (most of us had full class responsibility). Shared readings as well.

Attended many teaching workshops and seminars and participated as a fellow in a program called Preparing Future Faculty.

There was a class on teaching business and one on advanced teaching methods offered at the graduate level. I took them during my master's program. However, I have a B.S. in business education so I didn't feel like I needed additional teaching courses at the Ph.D. level.

I minored in education --- took 4 courses.

CAN TRANSFERABLE TEAM SKILLS BE TAUGHT? A LONGITUDINAL STUDY

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ABSTRACT

This study is a longitudinal empirical investigation aimed at answering the question, "Can transferable teamwork skills be taught?" The study examined the question of whether or not a Team-Based Learning experience (TBLE) (Michaelsen, Knight & Fink, 2004) had an enduring impact on students' teamwork skills. The data showed that students with prior TBLE received higher peer evaluation scores in a subsequent course than students with no prior exposure to TBLE coursework. While other explanations for the higher peer evaluations received by students with prior TBLE were explored, none were found. Students who had participated in the TBLE were rated by their peers as making a greater contribution to their peers' learning and team's performance. Thus, the study supports the conclusion that enduring teamwork skills can be taught.

KEYWORDS

Team based learning, team learning, teamwork, peer evaluations.

INTRODUCTION

Over the past decades, an increasing number of management teachers have begun to incorporate small group work in their courses for two reasons. One is related to the fact that the workplace has become team-oriented (see Peters, 1992; Peters & Austin, 1985; Dunmaine, 1991; Boudette, 1990; Levine, 1991; Machlis, 1992). A recent national study conducted on behalf of the Association of American Colleges and Universities reported that the single most important skill employers look for in new hires is teamwork skills (Hart Research Associates, 2008). As a result, many management professors assume that having students participate in group work will help them find employment and/or do well once they go to work. The other reason for using small groups is that numerous studies over the past 30 years (e.g., Slavin, 1983; Johnson, Johnson & Smith, 1991; Millis & Cottell, 1998; Godsell, Maher, Tinto, Smith & MacGregor, 1992; Hamilton, 1997; Bruffee, 1999; Michaelsen, Watson, Cragin & Fink, 1982; Michaelsen,

1992; Michaelsen & Black, 1994; Michaelsen, Black & Fink, 1996; Michaelsen, Knight & Fink, 2004) have argued that, compared to traditional instruction, using appropriately structured small group assignments and activities generally increase learning, retention, and even the ability to learn from subsequent courses and experiences (e.g., Fink, 2004).

The current study is designed to address several weaknesses of the published articles on the impact of group work on students' teamwork skill development. First, few of the articles contain empirical data or directly address teamwork skill development. Instead, their primary focus is on advice for managing group work to eliminate uneven contributions (often referred to as free-riding, shirking, or social loafing) by group members (e.g. Bailey, Sass, Swiercz, Seal & Kayes, 2005; Brooks & Ammons, 2003; Bolton, 1999; Druskat & Wolff , 1999; Vik, 2001). Second, of the articles that do contain empirical data, few have comparison groups (e.g. Borges, Kirkham, Deardorff & Moore, in press; Chen, Donahue, Klimoski, 2004) and the data are often limited to student self-reports and/or perceptions about the effectiveness of their team (e.g. Chen, et al, 2004; Druskat & Wolff, 1999; Jaswalla, Sashittal, & Malshe, 2009,). Finally, the conclusions of the articles that do directly address the development of teamwork skills are based on end-of-term data (e.g. Borges, et al, in press). As a result, there is little or no empirical evidence as to the longer-term impact of small group work on teamwork skill development.

BACKGROUND

Data used for the study were collected from students at a medium-sized mid-west state supported university. Some of the students were enrolled in a set of concurrent courses in a previous semester. Two of the concurrent courses (the Management and the Management Information Systems courses), were taught using an intensive small team based instructional strategy called Team-Based Learning (TBL—see Michaelsen, et. al., 2004). As a result, students in these courses: 1) were assigned to the same permanent 5-7 member team, 2) were graded on a combination of individual and team performance peer evaluations, 3) received feedback from their team mates on their individual contributions to their team on several occasions during the course of the semester and, 4) over the course of the semester took a total of 13, 15-17 item, multiple-choice Readiness Assurance Tests that were answered first as individuals, then answered again by reaching a team consensus. These Readiness Assurance tests are an integral part of the Team-Based Learning experience and enable students to receive real time feedback on every decision they make through the use of IF-AT (i.e., "scratch-off") answer sheets (e.g., see Michaelsen et al, 2004: 17 & 86; Sweet & Pelton-Sweet, 2008). In addition, students: 5) spent the vast majority of in-class time in these courses working on decision-based application assignments that were also specifically designed to provide teams with immediate feedback on how effectively they were applying course concepts.

We were curious about the long-term impact of this intensive group-based experience for our students. We wondered if Team-Based Learning had an effect on students' contributions

to their team's performance in a subsequent course. This research examines how a Team-Based Learning treatment, which we will refer to as a Team-Based Learning experience (TBLE), affects students' performance and behaviors in a subsequent class.

METHODOLOGY

Data Collection

The goal was to determine if a TBLE has a positive effect on students' ability to work effectively in learning teams in a subsequent class. Data for the study were collected from students enrolled in four sections of a Production and Operations Management course during the two semesters following the first offering of TBLE. When these data were collected, management majors were the only major in the college required to take this TBLE. At that time, students majoring in Marketing, Finance, Accounting and Computer Information Systems had the option of participating in this TBLE or taking the core Marketing, Management and Management of Information Systems courses taught in a traditional lecture-discussion format. Unlike the TBLE classes, the majority of the team work in the non-TBLE classes involved projects that were completed outside of the class. Additionally, there were many management majors who had taken the traditional courses before the TBLE and, as a result, were unable to participate in the TBLE experience. Lastly, there were only a handful of TBL based courses in the college when these data were collected which provided reassurance that the TBLE tested in this research was the first TBLE the students had experienced.

Because most students who participate in the TBLE take Production and Operations Management (POM) during the semester following the TBLE, we determined that POM would be an ideal environment in which to collect data. Students registered for these sections independently and we were not able to influence registration. The majors for the students involved in the study are summarized in Tables 1 and 2. In both semesters, the instructor deliberately assigned members to teams to ensure as much diversity as possible with regard to majors, skill sets and gender, as permitted given the majors enrolled in each course (Michaelsen et al, 2004: 217). The instructor also ensured that students who had been on the same team in the TBLE were not on the same team in POM. The overall intent of the team formation process was to distribute majors and TBLE across teams to eliminate the possibility of previously established social relationships.

Table 1. Demographics of Students in two POM Sections -Spring							
	Major	**Fin.**	**Acct.**	**CIS**	**Mkt.**	**Mgt.**	**Totals**
Spring	TBLE	1	1	0	2	15	19
	No TBLE	6	9	6	9	10	40
Totals		7	10	6	11	25	59
* one student was not a business major and had not participated in the previous TBLE.							

Table 2. Demographics of Students in two POM Sections -Fall							
	Major	Fin.	Acct.	CIS	Mkt.	Mgt.	Totals
Fall	TBLE	1	1	2	2	12	18
	No TBLE	6	9	5	5	6	31
Totals		7	10	7	7	18	49

During both semesters, the POM course utilized Team-Based Learning and was taught by the same instructor. As a result, grades in both courses were based on the same combination of individual assignments, Readiness Assurance Tests, individual and team exams, team projects and assignments, and a peer evaluation. In addition, the team assignments, exams, and processes were the same from section to section and from semester to semester; thus the portions of the course that related to H_1 were the same in both semesters.

HYPOTHESES

Successful completion of the team assignments in the POM course requires two very different kinds of competencies. One is the possession of teamwork skills of the kind that are often claimed to have been developed by participation in TBL courses (e.g., Fink, 2004). These include such things as proficiency in managing team discussions so that members' contributions would be elicited and evaluated effectively. Without these teamwork skills, the teams in this POM course could not have been successful at making the well thought-out, team-consensus decisions upon which all of the team assignments and tests were based. Therefore, the primary focus of the study was to assess whether or not these critical teamwork skills were, in fact, developed through the intensive small team problem-solving work in the prior TBLE. The other competency that was required for successful completion of the team assignments in the POM course was the possession of and the ability to apply quantitative skills (e.g. forecasting, break even, etc.). Based on several years of observation by the instructor, these skills are usually brought to the table by accounting and finance majors. Thus, we felt it would be important to explore the possibility that members' perceptions of the value of each others' contributions might have been based on quantitative skills as opposed to teamwork skills.

> *H_1: Participation/non-participation in a TBLE in a prior semester has no effect on peer's perceptions of member's contributions to other members' learning and team performance.*

We collected data on students' teamwork skills by asking them to evaluate the contribution to their learning and/or their team's performance during the course of this semester by the other members of their team. We collected our data at the end of the semester using a form identical to the one shown in Figure 1, except that the comments section is smaller than

actual size in an effort to save space; a generous amount of room is provided for comments on the actual form.

Fink (2004), Innes (2006) and others suggest that authentic learning environments such as those which use TBL create useful knowledge which can be applied in the future to similar situations. These skills could then translate into the ability to have higher performing teams in subsequent classes as past TBLE students should be able to help the other students on the team more quickly learn team-based skills and processes.

When the author, who teaches operations management, first began using TBL, advice was provided by a TBL expert regarding the formation of teams. Students with past TBL experience were spread among the teams rather than clumped into a few of the teams. The logic behind this was that if teams had only TBLE students they would have a substantial advantage over teams with no TBLE students because of their superior team skills.

> *H₂: Participation/non-participation in TBLE in a prior semester has no effect on the team's grades in a subsequent class.*

> *H₃: Teams with a greater number of past TBLE students have the same team grades as those teams that do contain not past TBLE students.*

It has been found that the longer a team works together the more mature the team (Krayer, 1988) and the better the team experience and processes (Bacon, Stewart & Silver, 1999). It can also be noted that it is a commonly accepted but empirically untested notion that team training and/or prior experience as a member of a mature team improves team performance (Michaelsen & Knight 2004; Zemke, 1993; Bolton, 1999). It has been established that teams who are not cohesive initially have difficulty catching-up to teams who are initially cohesive or to teams whose members knew each other from a prior setting (Wolfe, Bowen & Roberts, 1989; Gosenpud & Miesing, 1984). Lastly students who have a social network, such as the network created in a prior TBLE, have higher performance on team projects (Baldwin, Bedell and Johnson, 1997). However, two studies have not been able to relate team training to performance. Eden (1985) and Bacon, Stewart & Silver (1999), conducted survey studies rather than experimental design and did not control for team size or the nature of the training.

Figure 1
CONFIDENTIAL PEER EVALUATION

Name _____ **Team #** _____

Please assign scores that accurately reflect how you *really* feel about the extent to which the other members of your team contributed to your learning and/or your team's performance during the course of this semester for the purpose of GROUP QUIZZES & EXAMS. This will be your only opportunity to reward the members of your team who worked hard. (NOTE: If you give everyone pretty much the same score you will be hurting those who did the most and helping those who did the least.)

INSTRUCTIONS: In the space below please rate each of the OTHER members of your team. Each member's peer evaluation score will be the average of the points they receive from the other members of the team. Keep in mind their class attendance during the project, class participation in the group, outside of class attendance at team meetings and participation, as well as whether the member contacted the group to see how they could assist the group when class was missed.

To complete the evaluation, you should

1. List all the members of the group below (except yourself)
2. Assign a <u>total</u> of __ points to the other group members.
3. Do not assign points to yourself.
4. Please differentiate in your ratings; do not give all team members the same score. Try to give at least one person a score of __ or higher.

Name	Score
1	
2	
3	
4	
TOTAL	The points must sum to ____ (see 2 above)

ADDITIONAL FEEDBACK: In the space below would you also briefly describe your reasons for your highest and lowest ratings? These comments- but not the information about who provided them – will be used to provide feedback to students who would like to receive it.

Reason(s) for your highest rating(s) (use back of page if necessary)
Reason(s) for your lowest rating(s) (use back of page if necessary)
Do any of your team-mates have any special strengths that you would like to note? (use back of page if necessary)

RESULTS

We hypothesized that participation/non-participation in a TBLE in a prior semester has no effect on peer's perceptions of member's contributions to each others' learning and team performance. The following data indicate the value of the TBLE may lie in the team skills students gain through the TBLE.

Table 3 shows points received by team members on the end of semester peer evaluation. For the end of semester peer evaluation, the F value =4.16 and (Pr>|t|) =0.04. Therefore, the result is significant. The students who participated in a TBLE in a prior semester received higher end of the semester peer evaluation scores.

Table 3: End Semester Peer Evaluation Scores –Fall & Spring		
Non TBLE	TBLE	
19.54	21.01	Mean
12.40	11.37	Variance
3.52	3.37	Std. Dev.
75	34	N

We also examined the possibility that TBLE vs. Non-TBLE participation would affect a team's scores for the spring semester data. There were three types of team assessments in the POM class. One was a project where students made decisions and acted as a team, one type were team exam scores, and finally, the team's scores on each team TRAT (a readiness assessment given to the individuals and then to the team) were totaled. Therefore, we propose *H_2: Participation/non-participation in TBLE in a prior semester has no effect on the team's grades in a subsequent class.* As can be seen by the results in Table 4 , H_2 is supported, as TBLE vs. non-TBLE participation has no impact on team scores. In fact, Team Exam totals shows a remarkable lack of impact or difference between teams.

H_3: Teams with a greater number of past TBLE students have the same team grades as those teams that do not include past TBLE students. To test this proposition, an "TBLE member difference score" was created. For each team, the numbers of non-TBLE students were subtracted from the number of TBLE students. For example, if a team had 0 TBLE students, and 4 non-TBLE students, the difference score is -4. If a team had 4 TBLE students and 1 non-TBLE students, the difference score is 3 (see column for 'difference score in Table 5, below).

The proposed impact of team membership was tested on two categories of team score which created two sub-hypotheses within H_3. The first comparison is the total of team scores, which is the sum of Team RATs (TRATs), Team exams, and Team project scores. Thus, *H_{3a}: Teams with a greater number of past TBLE students have the same total team grades as those teams that do not include past TBLE students.* For H_{3a}, the impact of TBLE members vs. non-members was not significant (F-0.39, (Pr>|t|) = 0.54), and H_{3a} is supported.

The other comparison is the average of the overall points earned by the team members out of 1000 possible points. Thus,

> *H_{3b}: Teams with a greater number of past TBLE students in a prior semester have the same average total scores of team members as those teams that do not include students with participation in TBLE in a prior semester.*

For **H_{3b}**, a regression was used to compare the impact of difference scores on Total Average Scores. The GLM shows an F value of 1.26 with probability of 0.28. This indicates that the composition of the team does not make a difference on the average of total scores of team members.

TABLE 4. Team Grades for the categories noted			
	Project Scores	Team Exam Totals	Team RAT Scores
NO TBLE			
Average	111.58	68.35	51.65
Variance	54.61	37.43	33.68
St dev	7.39	6.12	5.80
N	40	40	40
TBLE			
Average	112.17	68.54	49.00
Variance	23.79	7.71	48.31
St dev	4.88	2.78	6.95
N	18	18	18
F value	0.10	0.02	2.30
Probability	0.76	0.90	0.14

TABLE 5. TBLE vs Non TBLE Teams with Difference Score				
Team	# of Non-TBLE students	# of TBLE Students	Difference Score	Total Team Scores	Average of Total Scores of Team Members
1	4	0	-4	244	832
2	5	0	-5	257	864
3	4	0	-4	230	775
4	4	0	-4	231	735
5	5	0	-5	253	849
6	4	0	-4	247	829
7	0	4	4	237	794
9	2	2	0	247	770
10	3	1	-2	244	675
11	2	2	0	242	794
12	2	2	0	250	821
13	2	2	0	244	736
14	2	2	0	260	862
15	1	3	2	232	703

DISCUSSION

It would be reasonable to assume that, since the subsequent POM class required quantitative knowledge and application skills, students with higher content knowledge might

receive higher peer evaluations because of their knowledge-based contributions. As a result, we compared overall course performance by major using the Bonferroni-Holm method (see tables 6 & 7). The advantage of the Bonferroni-Holm method is that all significances found using this method are real, since the probability of any error is small (Westfall, 2002). Table 6 shows that, true to form, Accounting students on average earned significantly higher grades in this course than any other major except Finance. Thus the students with the TBLE, who were primarily management majors, would not have received higher peer evaluation scores because of a better understanding of course content. In fact, the difference between Accounting and Management majors' total course scores was significant at *p*= .05 (see Table 7).

Table 6: Total Earned Points in Course by Major – Spring					
	Accounting	Finance	Marketing	Management	CIS
Average	843.78	830.05	773.29	770.23	740.83
Variance	2894.16	4146.39	2187.14	11008.15	18153.28
St Dev	53.80	64.39	46.77	104.92	134.73
N	10	7	11	25	6

Table 7: Significance of Bonferroni-Holm LSM: Total Earned by Major - Spring				
	Accounting	CIS	Finance	Management
Accounting	.			
CIS	0.02	.		
Finance	0.75	0.07	.	
Management	0.05	0.35	0.16	.
Marketing	0.07	0.46	0.18	0.89

Although the peer evaluation scores assessing students' contribution to their peers' learning and their team's performance are not a direct measure, we would, nonetheless argue they are a valid indicator of students' teamwork skills for three reasons. First, the students who had a prior TBLE had individual test scores that were significantly lower than their Accounting and Finance peers. Therefore it is highly unlikely that the TBLE student's higher peer evaluation scores were based on their having primarily made content knowledge contributions. Second, based on having "listened-in" on the conversations during the team Readiness Assurance Tests, the course instructor had the distinct impression that TBLE students were taking the lead in ensuring that the teams worked hard to achieve a consensus by explicitly arguing against tactics (e.g. voting) that would minimize conflict but fail to fully elicit and evaluate potential peer contributions. Third, many of the comments on the peer evaluation forms focused on process-related issues. In addition, the dominant theme in the peer evaluation comments was that the students with the TBLE were viewed as committed to the success of the team and as accepting responsibility for moving the team forward. Lastly, participation in a TBLE in a prior semester or having TBLE members on a team had no effect on grades.

CONCLUSIONS

The current research considers an experiment where students participated in a TBL environment during one semester. The effect of the TBL experience was then compared in a subsequent semester. The current study is designed to address several weaknesses of the published articles on the impact of group work on students' teamwork skill development. First, few of the articles either contain empirical data or directly address teamwork skill development. Instead, their primary focus is on advice for managing group work to eliminate uneven contributions (often referred to as free-riding, shirking, or social loafing) by group members. Second, of the articles that do contain empirical data, few have comparison groups and the data are often limited to student self-reports and/or perceptions about the effectiveness of their team. Finally, the conclusions of the articles that do directly address the development of teamwork skills are based on end-of-term data. As a result, there is little or no empirical evidence as to the longer-term impact of small group work on teamwork skill development.

Data from the current study, however, indicate that participation in a TBLE in a prior semester creates team skills which are significant enough to carry over to a subsequent course and earn significantly different, and better, peer evaluation scores. Surprisingly, this means that simply having content related skills is not enough to be highly rated on contribution to peer's learning and team performance, good team skills are essential to peer evaluation scores. This also indicates that participating in a TBLE improves teamwork skills in a subsequent course.

LIMITATIONS AND FURTHER RESEARCH

There are several possible limitations to the research. First, we believe the students did not have previous TBL classes because so few were offered in the college at that time. However, there is no way to confirm this belief. A pre-post test 'team skills' instrument was not utilized to see if the students had increased teamwork skills through other treatments. It is also possible that students with better people and team skills self select into 'soft skills' majors, like marketing and management. However, as indicated in Tables 1 and 2, of the 61 management and marketing students in the study, 30 had not participated in the TBLE and 31 had participated. Thus the 'treatment' was effectively distributed such that we are rather confident that the TBLE, rather than existing level of skills, affected the peer evaluations and indicated improved teamwork skills in those students who had the TBLE treatment.

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UNDERSTANDING ADULT LEARNERS BY GENDER

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ABSTRACT

The study examines the motivations and barriers of adult learners by gender and also compares same gender results from a 2004-2005 study with those from a 2010 study. The study includes nontraditional students (age 25 and over) enrolled in four-year colleges offering programs designed for working adults. Responses were gathered from convenience samples of face-to-face learners (683) in five private institutions and one public university in 2004-2005 and face-to-face and online learners (530) in three private institutions in 2010. The findings reveal differences between males and females in perceived motivations and barriers as well as same gender differences over time.

INTRODUCTION

Much attention has been given to exploration of adult learners since the term *andragogy* was first used by Kapp in 1833 (Reichman, 2004) and coined by Knowles in describing self-directed learning (Knowles, 1979). A range of literature underscoring the international recognition of the benefits of lifelong learning exists, and a growing interest is noted in research that identifies attributes, needs, experiences, perceptions, challenges, and enrollment patterns of males and females in nontraditional tertiary programs, however, a consensus about the role of gender in adult learning has not emerged. Each study seeks to characterize some aspect of the growing community of adult learners.

The purpose of the present study is to examine the motivations and barriers of adult learners by gender, comparing results and understanding gender differences from a 2004-2005 study with results from a 2010 study of nontraditional students enrolled in four-year colleges or universities that offer programs designed for working adults.

The interest in motivation and barriers to adult enrollment motivations coincides with an actual increase in enrollment by adults. The National Center for Education Statistics (NCES) reports that while traditional age college enrollment grew by 27 percent from 2000-2009, enrollment by those age 25 and over grew by 43 percent. For females in post-baccalaureate programs, enrollment has outpaced that of males since 1988. (NCES, 2010).

The addition of online programs by colleges and universities has created virtual communities of learners whose geographic barriers have been reduced or eliminated. The convenience of these and other nontraditional degree programs targeting adult learners has expanded higher education's student demographic and provided an equalizing effect for females whose traditional domestic roles previously created a delay to their enrollment.

An initial study of motivations of and barriers to adults returning to college was conducted in 2005. Data collection for the project began in early 2004 with convenience samples of over 600 adult learners enrolled in four-year, non-traditional degree programs at private colleges. The analysis of the 2004-2005 group revealed no significant differences in motivations or barriers to enroll in college based on gender. The current study compares that group with the 2010 sample of learners to examine if differences exist between the two groups along gender lines.

This study is limited. Only those enrolled in college at the time of the survey were questioned, so it does not provide a representative sample of individuals whose barriers were so significant as to prevent enrollment. It also does not examine persistence to graduation among the students surveyed or re-enrollment patterns. There is a dearth of studies which explore motivations and barriers of adult learners to seek higher education and the literature lacks in generalizability. There appear to be ample regionalized studies from the U.S. and abroad to suggest similarity among the barriers and motivations of adult learners. This undergirds the importance of examining gender differences as a means to inform institutions, enrollment and retention offices, and employers who seek to level the playing field of access to education for males and females.

LITERATURE REVIEW

This study and its precedents define adult learning using the Osgood-Treston (2005) description of those age 25 or older who have need-based goals, multiple commitments, and experience that contributes to their learning. The Osgood-Treston study also divides adult learners into two groups: one seeking enrichment and community education and the other seeking academic credit. This study focuses on the adult learner enrolled for academic credit.

Gender theorists are at odds over perceived versus actual contributors to male and female differences in behaviors. Bem (1994) defends the use of a "cultural lens as a tool of analysis", noting that gender differences are self-evident and should be accepted as such so that their transformation into disadvantage can be analyzed. Her point that developing individuals construe reality embedded in what is communicated and institutionalized provides the argument for understanding the "lenses of gender" through which schemas are filtered.

Eagly and Wood (1999) examine evolutionary psychology and social structure theory and conclude that the two may be compatible to explain male and female behavior in some situations, cautioning that social change emerges from individuals' efforts to "maximize their personal

benefits and minimize their personal costs." Gouthro's (2009) work examining neoliberalism, lifelong learning, and the homeplace reiterates the thought that the gendered identity in the domestic environment is so strong as to not be challenged, which could explain perpetuation of gender inequality as a taken-for-granted norm.

Kleinfeld (2009) also credits the influence of the Women's Movement as a possible explanation for increased enrollment by women in post-secondary education and increased parity of women with men in high income fields such as law and medicine. At the same time, she suggests that concern should be focused on declining numbers of men (especially minority men) to earn degrees. The attention of the world has been focused in recent years on women's education as a means to regional and international development. Medel-Añonuevo and Bernhardt (2001) give attention to the changing priorities of the International Conferences on Adult Education, highlighting a shift in emphasis on women's education from center stage to periphery over a twenty year period. Special attention is given to gender parity in access to adult education (all forms, not only for academic credit) as gender interacts with other variables such as class, ethnicity, age, and geography.

Gerson (2004) supports the idea of a gender lens for peering at the confluence of gender with work and family change. Her findings suggest that women and men share similar aspirations, but may have very different constraints to achievement of the aspirations, which could partially explain timing differences in enrollment for males and females. An early study by Mohney and Anderson (1988) looked at life events and relationships as delaying factors for female enrollment in higher education. Caretaking and family responsibilities were cited as "life cycle" events that postpone enrollment. Like Eagly and Wood (1999), Mohney and Anderson suggest that individual decisions determine the timing of enrollment, and that the decisions of females are based on different values (or criteria) than the decisions of men.

Life course transitions provide a theme under which gender and age interact and have been studied by Jacobs (1998) who forecast a decline in the aging trend line of school enrollment by adults. Geiger, Weinstein and Jones (2004) followed this line of reasoning in their recommendation that colleges revise programs and curricula to suit the needs of adult learners. Technology has provided the bridge to higher education for adult learners whose career schedules and caretaking roles had previously presented barriers to their enrollment.

Motivation studies of adult learners have generally focused on motivation to learn, rather than motivation to enroll, although some have included motivation to persist. Tenacity of adult learners and the relationship of admissions test scores as predictors of performance has been studied by Hensley and Kinser (2001) and House and Keeley (1996). Lundberg (2003) looks at adult performance and suggests that institutions develop environments to: encourage social relationships, make use of students' time management skills, provide accessible faculty at convenient hours, and encourage quality relationships with school administration. The convenience of schedule is also a point of the Nellen (2003) study. Motivation to learn and its

positive correlation to student hardiness are examined in the Cole, Field, and Harris (2004) study.

Adult motivation to enroll can be broadly categorized as extrinsic or intrinsic, but most studies have revealed components of each. Maintenance or improvement of skills was among the most frequently cited reason for participating by adults in non-degree learning programs. Other reasons for enrollment included: to learn new skills, to keep a certificate or license, to meet the employer requirement for more education, or to receive more pay or promotion. The level of participation depends on age, income level, experience, and educational level (NCES, 2005). Among the top motivations from the Mbilinyi (2006) study were: a sense of accomplishment, pursuit of interests, potential for higher income, change in career, change in experience, and being a role model for children. Timarong, Temaungil, and Sukrad (2002) supported the developmental, promotional, and financial motivations that adults cite as reasons for enrolling in school.

Domestic relationships also influence the decision by adults to enroll. Vaccaro and Lovell (2010) examine hardiness in their study of women's participation as nontraditional learners. They found that family was a central component to women's motivation and inspiration to succeed in higher education, which potentially influences persistence. Jacobs and King (2002) echoed the high impact of family and support on women's decisions regarding education. They found "the presence of school age children reduces women's likelihood of finishing", noting that the effect varied with age, but that even older women with children were less likely to complete than childless women.

Barriers to education among adult returners have been studied extensively. Ritt (2008) summarizes these as: "geographic location, personal and family commitments, work and family related activity schedules, past experiences in college, lack of adequate and consistent childcare services, financial limitations, and in some instances a general fear of returning to school." These barriers were generally supported in the Timarong et al. (2002) study. Kasworm (2008) further notes emotional challenges to adults in higher education who must add the role of student to already complex lives and continually define themselves as adult students. In contrast, younger, traditional students college represents a physical separation from their "past worlds". Waller (2008) suggests that there may be institutional barriers to women based on patriarchal cultural environments in higher education, particularly among Christian colleges and universities, where female students enroll in lower numbers as compared to public universities.

It is widely accepted that some of the barriers that existed for adult learners in 2004-2005 have been considerably diminished by the availability of online programs of study. Such programs often reduce or eliminate altogether previously acknowledged geographic and schedule boundaries. Kasworm (2011) identifies the global trend among higher education providers to offer classes in nontraditional day and time slots, while moving in a more market-driven, profit-based direction.

The authors' original study found that nontraditional students cited the following as their chief motivations for seeking degree completion programs: personal accomplishment; finishing a degree started earlier, but not completed; role modeling for children, knowledge and skills in the area, and seeking a new career. Barriers noted were: care giving for a child or elder, funding for childcare and college, concern about paying back student loans, time away from family, and convenience factors related to location and time. In the 2004-2005 study there were no significant differences found between the sexes.

HYPOTHESES

The hypotheses regarding the differences between respondents along the lines of sex/gender are:

H1: Adult students will differ significantly by gender in their motivations for seeking higher education.

H2: Adult students will differ significantly by gender in their barriers to higher education.

H3: Same gender motivations for seeking higher education will differ over time (2004-05 to 2009-10).

H4: Same gender barriers to higher education will differ over time (2004-05 to 2009-10).

METHODOLOGY

Sample

The survey in the 2004-2005 study was administered in classrooms to 683 students attending six separate private institutions and one public university in four U.S. states and one Canadian province. Both in-person delivery and online delivery were used for distribution of the survey in the 2010 study, which produced 530 respondents. Administrators self-reported that the number of respondents from their institution represented at least 30% of the total population of adult learners at the institution.

Despite the passage of time between the cohort groups, those surveyed were assumed to be similar based on their general characteristics as adult learners and the sameness of the institutions from which the convenience samples were drawn.

Survey Design

The survey instrument was developed in 2004 using items of significance noted in the literature review and the responses to open ended questions of two convenience cohorts of adult students, one enrolled in an undergraduate program and the other in a graduate accelerated business program. Students were asked to list their five most significant motivations for seeking their degree and their five most significant barriers to attending college. Cohorts were advised to record items that they believed had motivated them or had acted as barriers, excluding the marketing efforts of the program.

The resulting questionnaire (Appendix A) contained 51 items, including: institutional identification; level of degree and course of study; demographic information, with questions designed using U.S. Census Bureau standards; fifteen motivators and sixteen barriers to which respondents self-rated using a Likert-style scale. Participants had the option of indicating that motivators and barriers were not applicable. The final item was an open-ended question for additional remarks from participants, which queried, "Are there any additional motivations you had or barriers you faced (or currently face) in your decision to enroll in college for the degree you currently seek?" An online version of the questionnaire was altered slightly to fit the format of delivery.

ANALYSES OF DATA

The comparison of the responses from 2004-2005 with those of 2010 can be limited by unmeasured variables, such as those noted in the limitations of the study; however, "quasi-comparability" (Cook & Campbell, 1979) can be assumed based on the sameness of the formal institutions in which respondents were enrolled, the cyclical nature of turnover in the formal institution, and the age differentiation of those surveyed (25 and older).

HYPOTHESES

Regarding differences in means between the 2004-2010 and 2010 samples were tested using independent samples t-tests with accompanying F tests for homogeneity of variances. These tests were applied to variables measured using interval level Likert scales. Differences between the two groups for nominal and ordinal scaled measurements (i.e., yes/no) were assessed using Chi-Square tests for independence.

FINDINGS

Descriptive Statistics

Nearly 67% of respondents were under the age of 35, while 33.2% were 35 years of age or older. Respondents were 48.6% African American, 45% white, and 6.5% of some other race or ethnic background. Females were more likely than male respondents to be African American (56.7% versus 33.1%, respectively), while males were more likely than females to be white (59.9% versus 31.1%, respectively). Slightly over 61% of respondents reported annual household income less than $50,000, while 38.6% reported annual household income greater than $50,000. Females were more likely than males to report annual household income under $50,000 (65.4% versus 53.8%, respectively). Slightly over 73% of respondents were employed full-time while 19.6% were employed part-time. Females were somewhat more likely than males to be employed full time (75.3% versus 69.5%, respectively). The majority of respondents (77.8%) resided in Mississippi, with the remainder residing in Florida (8.0%), Texas (7.4%), Tennessee (3.2%), Nebraska/California (2.5%), or Michigan (1.1%). Females were more likely than males

to reside in Mississippi (80.1% versus 73.5%, respectively), while male respondents were more likely than females to reside in Texas (12.5% versus 4.7%, respectively).

Slightly over 38% of respondents had children under the age of 12 and 25.2% had children between the ages of 12 and 18 living with them. Females were more likely than males to have children under the age of 12 living with them (41.5% versus 32.5%, respectively). Slightly over 45% of respondents were living with their spouse. Males were more likely than females to be living with their spouse (52.3% versus 41.4%, respectively). Twenty-two percent of respondents had relatives other than their children living in their home, and this condition was more prevalent among female respondents (24.8% versus 16.6%, respectively). Slightly over 11% of respondents had non-relatives living with them, especially male respondents (16% versus 9.7%, respectively).

The degree most frequently sought by respondents was the Bachelors (65.8%) followed by Masters (30.1%), Associates (2.4%) and Doctorate (1.7%). The majors most frequently sought were Business (53.3%), Management (11.2%), Social Services (7.1%), Ministry and Leadership (6.0%), Marketing (5.2%), Accounting (4.1%), and Education (3.2%).

Hypothesis Tests

Independent-samples t-tests were conducted to compare gender differences in motivations for seeking higher education. The results are depicted in Table 1.

Table 1

Note. *=p≤.10, **=p≤.05, ***= p≤.01, ****=p≤.001. Standard Deviations appear in parentheses below means. Equal variances not assumed for all t-values.

The data indicate that there are significant differences between female and male respondents regarding their motivations for seeking higher education. Specifically, the data suggest that women are more motivated to seek higher education due to encouragement by a child (p ≤ .001) and a desire to be a role model for a child (p ≤ .001). Also, women are more likely to seek higher education to broaden opportunities for a new career (p ≤ .05).

Gender Differences in Motivations for Seeking Higher Education				
	Females	Males	t	Df
Enrolled Due to Desire for Personal Accomplishment	3.69 (.726)	3.62 (.721)	1.303	703
Enrolled Due to Desire to Finish Degree	3.15 (1.081)	3.03 (1.161)	1.339	434
Enrolled Due to Desire for Knowledge/Skills	3.48 (.766)	3.44 (.736)	.694	709
Enrolled Due to Desire for Advancement Opportunities	3.10 (.902)	3.08 (.898)	.264	663
Enrolled Due to Desire for Pay Increase	2.80 (1.032)	2.75 (1.028)	.760	601

Enrolled Due to Desire for Promotion	2.70 (1.035)	2.69 (1.040)	.168	575
Enrolled Due to Desire to Keep Current Job	2.13 (.934)	2.06 (.948)	.977	504
Enrolled Due to Desire for New Career	3.20 (.986)	3.05 (1.018)	2.163**	598
Enrolled Due to Spouse/Significant Other	2.63 (1.029)	2.58 (1.013)	.691	537
Enrolled Due to Child	2.66 (1.060)	2.20 (1.005)	5.468****	418
Enrolled Due to Parents	2.74 (1.017)	2.66 (1.025)	1.038	565
Enrolled Due to Employer	2.46 (1.005)	2.38 (1.022)	1.025	487
Enrolled Due to Friends	2.75 (.999)	2.64 (.998)	1.580	599
Enrolled Due to Desire to Be Role Model for Child	3.37 (.965)	3.08 (1.035)	3.734****	482
Enrolled Due to Desire for More Respect from Peers	2.79 (1.016)	2.72 (.998)	1.010	652

The results of the independent-samples t-test comparing gender differences in perceived barriers to seeking higher education are presented in Table 2.

Table 2

Gender Differences in Perceived Barriers to Seeking Higher Education				
	Females	Males	t	Df
Barrier to Enrollment - Lack of Confidence	1.83 (.850)	1.75 (.802)	1.370	684
Barrier to Enrollment - Concern About Attending with Younger Students	1.84 (.832)	1.73 (.749)	1.904*	695
Barrier to Enrollment - Lack of Transportation	1.60 (.676)	1.55 (.647)	1.030	644
Barrier to Enrollment - Lack of Grants/Scholarships	2.31 (1.005)	2.19 (1.009)	1.645*	622
Barrier to Enrollment - Lack of Funds	2.58 (1.038)	2.47 (1.512)	1.175	476
Barrier to Enrollment - Concern About Paying Student Loans	2.70 (1.073)	2.41 (1.053)	3.947****	637

Barrier to Enrollment - Discouragement by Spouse/Significant Other	1.56 (.685)	1.57 (.711)	-.177	505
Barrier to Enrollment - Discouragement by Parents	1.44 (.599)	1.48 (.628)	-.857	549
Barrier to Enrollment - Discouragement by Employer	1.47 (.590)	1.48 (.576)	-.285	566
Barrier to Enrollment - Time Away From Job	1.80 (.820)	1.90 (.866)	-1.745*	567
Barrier to Enrollment - Time Away From Family	2.33 (.995)	2.11 (.964)	1.816*	618
Barrier to Enrollment - Lack of Childcare	1.99 (.944)	1.75 (.779)	3.412***	504
Barrier to Enrollment - Lack of Funds for Childcare	1.94 (.933)	1.72 (.767)	3.170**	503
Barrier to Enrollment - Role as Caregiver	1.74 (.838)	1.59 (.681)	2.422**	478
Barrier to Enrollment - Lack of Classes at Convenient Times	1.98 (.924)	1.97 (.875)	.182	608
Barrier to Enrollment - Lack of Classes at Convenient Location	2.05 (.934)	1.99 (.870)	.083	656

Note. *=p≤.10, **=p≤.05, ***= p≤.01, ****=p≤.001. Standard Deviations appear in parentheses below means. Equal variances not assumed for all t-values.

The data indicate that there are significant differences in perceived barriers to seeking higher education between females and males. Women are more likely to feel impeded by concern about paying student loans (p ≤ .001), lack of childcare (p ≤ .01), lack of funds for childcare (p ≤ .05), role as a caregiver to a family member (p ≤ .05), time away from family (p ≤ .10), lack of grants/scholarships (p ≤ .10), and concern about attend with younger students (p ≤ .10). However, men are more likely to perceive time away from the job as a deterrent (p ≤ .10). The results are consistent with the literature which suggests that women are more likely to experience barriers to seek higher education as a result of domestic responsibilities. In sum, the

barriers to seek higher education for women evolve around domestic barriers and financial barriers.

Comparison of 2004-2005 and 2009-2010 Samples

Independent-samples t-tests were also conducted to compare changes in perceived motivations for and barriers to seeking higher education over time among both male and female respondents. Mean ratings for the 2004-2005 and 2009-2010 academic school years were compared and the results are reported in Tables 3 and 4. Table 3 highlights the results for men.

Table 3
Significant Differences in Motivations for & Barriers to Seeking Higher Education among Male Respondents between 2004-05 & 2009-10

Males				
	2004-05	2009-10	t	Df
Enrolled Due to Desire to Finish Degree	2.93 (1.169)	3.28 (1.105)	2.134**	119
Enrolled Due to Desire for Knowledge/Skills	3.39 (.760)	3.59 (.631)	2.352**	153
Enrolled Due to Desire for Advancement Opportunities	3.03 (.908)	3.26 (.845)	1.982*	126
Enrolled Due to Desire for Pay Increase	2.68 (1.035)	2.97 (.976)	2.082**	110
Enrolled Due to Desire to Keep Current Job	1.96 (.923)	2.41 (.956)	3.208***	90
Enrolled Due to Child	2.09 (.962)	2.48 (1.064)	2.472**	95
Barrier to Enrollment - Concern About Attending with Younger Students	1.65 (.699)	2.00 (.844)	3.215****	106
Barrier to Enrollment - Lack of Transportation	1.51 (.638)	1.69 (.661)	2.038**	120
Barrier to Enrollment - Lack of Grants/Scholarships	2.05 (.982)	2.66 (.961)	4.703****	122

Barrier to Enrollment - Lack of Funds	2.36 (1.628)	2.82 (.989)	2.980**	210
Barrier to Enrollment - Concern About Paying Student Loans	2.28 (1.040)	2.81 (.996)	3.990****	129
Barrier to Enrollment - Time Away From Family	2.14 (.948)	2.45 (.989)	2.279**	104
Barrier to Enrollment - Lack of Childcare	1.65 (.711)	2.04 (.894)	2.889***	81
Barrier to Enrollment - Lack of Funds for Childcare	1.62 (.692)	2.02 (.892)	3.008***	78
Barrier to Enrollment - Lack of Classes at Convenient Location	1.85 (.957)	2.44 (.793)	4.766****	105

*Note. *=p≤.10, **=p≤.05, ***= p≤.01, ****=p≤.001*. Standard Deviations appear in parentheses below means. Equal variances not assumed for all t-values.

While significant increases (at least p≤ .10) were observed for all variables reported in the table, the largest observed difference in perceived motivation among male respondents was the increase in desire to keep their current job (p ≤ .01). The largest observed increases in perceived barriers among men were: lack of convenient class locations (p ≤ .001), lack of financial assistance in the form of grants/scholarships (p ≤ .001), concern about attending with younger students (p ≤ .001) and concern about paying student loans (p ≤ .001). Table 4 presents analogous data for female respondents.

Table 4

Significant Differences in Motivations for & Barriers to Seeking Higher Education among Female Respondents between 2004-05 & 2009-10

Females				
	2004-05	2009-10	t	Df
Enrolled Due to Desire to Finish Degree	3.00 (1.123)	3.35 (.990)	3.667****	478.810
Enrolled Due to Desire for Pay Increase	2.68 (1.022)	3.00 (1.020)	3.658****	481

Enrolled Due to Desire for Promotion	2.56 (1.008)	2.91 (1.043)	3.913****	454
Enrolled Due to Desire to Keep Current Job	2.04 (.891)	2.29 (.984)	2.913***	375
Enrolled Due to Desire for New Career	3.09 (.986)	3.37 (.962)	3.524****	536
Enrolled Due to Spouse/Significant Other	2.49 (1.010)	2.86 (1.022)	3.922****	388
Enrolled Due to Child	2.44 (1.034)	2.97 (1.018)	5.563****	422
Enrolled Due to Parents	2.61 (1.004)	2.93 (1.006)	3.736****	490
Enrolled Due to Employer	2.38 (1.004)	2.58 (.997)	2.198**	436
Enrolled Due to Friends	2.61 (.994)	2.95 (.975)	4.007****	514
Enrolled Due to Desire to Be Role Model for Child	3.23 (1.031)	3.57 (.822)	4.247****	510
Barrier to Enrollment - Concern About Attending with Younger Students	1.78 (.807)	1.92 (.864)	1.952*	487
Barrier to Enrollment - Lack of Transportation	1.47 (.602)	1.79 (.733)	5.445****	433
Barrier to Enrollment - Lack of Grants/Scholarships	2.24 (.991)	2.41 (1.021)	2.035**	500
Barrier to Enrollment - Lack of Funds	2.45 (1.035)	2.77 (1.017)	3.721****	532
Barrier to Enrollment - Concern About Paying Student Loans	2.52 (1.050)	2.98 (1.048)	5.369****	520
Barrier to Enrollment - Time Away From Family	2.23 (.997)	2.49 (.974)	3.046***	498
Barrier to Enrollment - Lack of Childcare	1.92 (.900)	2.10 (1.000)	1.984**	339
Barrier to Enrollment - Lack of Funds for Childcare	1.86 (.874)	2.08 (1.009)	2.330**	314

Barrier to Enrollment - Role as Caregiver	1.66 (.788)	1.88 (.898)	2.410**	292
Barrier to Enrollment - Lack of Classes at Convenient Location	1.91 (.854)	2.24 (1.010)	4.145****	455

Note. *=p≤.10, **=p≤.05, ***= p≤.01, ****=p≤.001. Standard Deviations appear in parentheses below means. Equal variances not assumed for all t-values.

There were several highly significant increases in both perceived motivations and barriers among female respondents between the 2004-05 and 2009-10 time periods. The largest observed increases in perceived motivations were: desire to complete a degree (p≤.001), desire to attain a pay increase (p≤.001), desire for promotion (p≤.001), desire for a new career (p≤.001), influence of spouse or significant other (p≤.001), desire to be a role model for child (p≤.001), or because of a child, parent, or friend (p≤.001). The largest observed increases in perceived barriers among female respondents were: lack of classes at a convenient location (p≤.001), lack of funds (p≤.001), concern about paying student loans (p≤.001), and lack of transportation (p≤.001).

In summary, female respondents exhibited significant increases between the 2004-05 and 2009-10 academic years in a larger number of motivations for seeking higher education than did male respondents. These motivations were quite varied and included career, family, and relationship factors. While both female and male respondents exhibited increased concern about multiple barriers to pursuing higher education, increased concern about lack of convenient class locations and paying back student loans was common to both groups.

DISCUSSION

The findings support the hypotheses that adults will differ significantly by gender in both their motivations for and their barriers to higher education.

H1: Adult students will differ significantly by gender in their motivations for seeking higher education.	Supported
H2: Adult students will differ significantly by gender in their barriers to higher education.	Supported
H3: Same gender motivations for seeking higher education will differ over time (2004-05 to 2009-10).	Supported
H4: Same gender barriers to higher education will differ over time (2004-05 to 2009-10).	Supported

Females were significantly more likely to be motivated to seek higher education as a result of encouragement by children, the desire to be a role model for children, and to pursue a new career. At the same time, barriers that were more significant to females were numerous and included the lack of childcare, the lack of funds for childcare, acting as caregiver within the family, time away from family, time away from a job, lack of grants and scholarships, and concern about attending school with younger students.

The motivations and barriers of significance can be cast into several broad categories: domestic role, career role, and financial position. As noted in the literature review, females, despite legislated inclusion, lack domestic parity with regard to care giving roles. This may support, as Bem (1994) notes, that some differences are self-evident and are accepted, or that females may not view domestic parity in some roles as congruent with maximizing personal benefit, as suggested by Eagly and Wood (1999). Gouthro's (2009) assertion that gender inequality is perpetuated by the strength of the domestic environment. The significance of women's motivation to start a new career may reflect a greater proportion of females having been downsized from jobs. Another possible explanation for the finding is the delaying factors of females' entry into higher education, based on domestic role assignments, which often prioritize the breadwinner role of the male and the child-bearing, care-giving role of the female during the early years of the domestic arrangement. Males and females do reflect similar motivations for seeking higher education, and only three motivations of fifteen showed significant difference between the sexes. The females in this study mirrored most of the motivations noted in Mbilinyi's (2006) work.

Barriers of significance between males and females were more numerous in the study and provide a deeper look into the role responsibilities of females in the group surveyed. Lack of childcare and lack of funds for childcare as significant items suggest that the domestic situation does not lend itself to support of the return to school by these women, and can be attributable to no domestic partner in the home, a lack of other relatives or caregivers to provide support, a lack of child care or elder care at the time classes are offered, or lower socioeconomic status than peers with children or other family members receiving paid care. Time away from family was found to be a significantly greater barrier to females than to males and is a somewhat complex barrier that may be related to the lack of childcare or funds for childcare, or the care giving role for others in the family. It may also point toward the self-defined domestic role of the female care giver, hesitant to step outside the "life-cycle" time frame noted by Mohney and Anderson (1988). Females in this study were significantly more deterred from seeking higher education by concern about missing time at work, which suggests less flexibility in the work arrangement. This is possibly due to lower rank in the workplace for females, noting their lower self-reported household income in this study. The lower income report would also partially explain more significant concern among females about the lack of scholarships and grants for attending school. Finally, females were more concerned than males about returning to school with younger students, a finding that may be explained by a recognition that the life course trajectory of non-

traditional age students has differed from the younger group (who may be more similar in age to the children of the adult student). Interestingly, the finding was not accompanied by similar concern about their ability, which suggests that self-confidence is not an influence in the concern about attending with younger students.

While the purpose of the current study was primarily to examine gender differences in motivations and barriers, the comparison of year over year differences among males and the year over year differences among females suggests the influence of a declining economy on the later study group. Males in the 2009-10 group were more motivated to education by a desire to retain their job, while barriers to their enrollment dealt with convenient class locations, lack of financial assistance, and concern about paying back student loans. Females noted similar perceived barriers in the 2009-10 group in their need for more convenient class locations and concern about repayment of loans. Females in the later group also noted lack of funds and lack of transportation, making these likely candidates for affordable online degree programs or satellite campuses.

The largest observed increases in perceived motivations among females in the 2009-10 group were: desire to complete a degree, desire to attain a pay increase, desire for promotion, desire for a new career, influence of spouse or significant other, desire to be a role model for child, or because of the encouragement of a child, parent, or friend. The study's findings imply that male and female role delineations remain significant at the domestic level and continue to provide both motivations and barriers to the adult learner seeking to return to school. Females, persistent in their intent to complete education, are both motivated and impeded by their domestic roles, and could benefit from institutional support that addresses child and elder care at times when classes are offered.

Of significant interest is the finding that females draw motivation from a supportive network of individuals, both inside and outside the domestic arrangement. While discouragement from these groups did not appear to provide a barrier to the group studied (those enrolled), their encouragement was more important to the 2009-10 females in the study, suggesting that development of supportive educational networks has potential to aid females in both their decision to attend college and their intent to persist. This would imply that the use of social media and support groups should be further investigated to attract and retain females. Further, the high concern about the cost of education, coupled with the lack of available scholarships and grants for adult learners, supports the notion that institutions seeking to address the needs of the adult learner should consider strategies that make institutional aid available to all degree seekers, regardless of age. The high reliance on the supportive domestic and friends network also suggests the female decision to attend college as an adult may be an individual decision, but with many social network inputs. Program marketers might apply this knowledge in educational efforts toward a larger circle of decision influencers, including alumna. While online programs address some of the convenience issues related to adults' returning to school, opportunities remain to address the needs of both sexes as they consider higher education as adult learners.

LIMITATIONS

From its outset in 2004, the study did not attempt to investigate the motivations or barriers of students who were not enrolled in an institution of higher learning. A comparison of responses of students who expressed interest, but did not enroll, would be helpful in gathering a truer picture of motivations and barriers to the overall qualified population of potential adults who see benefit in seeking higher education but do not. In addition, the study did not attempt to capture the impact of university marketing efforts on student intent to enroll. A third limitation that was unforeseen in the original survey design was the lack of a specific question regarding the influence of employer assistance in the decision to seek education. The "lack of grants and scholarships" item may suggest a contraction in employer assistance, but there is no way to be certain. No public universities were included in the 2010 study, therefore, sensitivity to socioeconomic pressures may be under- or over-stated with the population surveyed. The use of a convenience sample is a limitation since the results cannot be generalized. Observed differences across time could be due to differences in the samples rather than true differences existing in the population.

FUTURE RESEARCH

The researchers expect to expand the current study to include between group comparisons along age, socioeconomic, and race/ethnicity in order to provide relevant information to academic program strategists to assist in recruitment, enrollment, and retention of adult learners.

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THE EFFECTS OF A SERVICE-LEARNING INTRODUCTORY DIVERSITY COURSE ON PRE-SERVICE TEACHERS' ATTITUDES TOWARD TEACHING DIVERSE STUDENT POPULATIONS

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ABSTRACT

The present study examines the impact of a service-based course in diversity on pre-service teachers attitudes toward the inclusion of diverse learners (special needs students) in the general classroom. We survey 110 students enrolled in the Teacher Education Program, or who have declared it their major program of study, at a private Southern liberal arts university. The instrument, Opinions Relative to Integration (ORI), measures pre-service teachers' attitudes toward including disabled students in the general education classroom. The findings in our study indicate an introductory class has impact in improving a pre-service teachers' attitude toward the inclusion of diverse learners, specifically students with disabilities, in the general education classroom. However, according to review of literature, this factor is not enough to improve the achievement levels of diverse learners whom are taught in the general classroom. Our findings are useful to academicians and educational professionals who are interested in the attitudes and dispositions of teacher candidates as they relate to diverse learners, and improved curricula to better prepare students for the inclusive classroom they will face upon graduation.

INTRODUCTION

In recent years a top priority within national educational policy has been teacher quality. How to best prepare teachers to meet the needs of the changing classroom continues to be a topic of discussion in schools of education across the country. With the changing face of America's public schools, teachers are being asked to produce more with less. Pre-service teachers must be armed with the tools necessary for addressing the increasing diversity within the public school classroom.

The number of students with disabilities receiving a majority of their education in the general education classroom has also dramatically increased. According to the *Twenty-seventh Annual Report to Congress on the Implementation of the Individuals with Disabilities Education*

Act (United States Department of Education, 2003), in 2003 ninety-six percent of students with disabilities were served in schools that served general education students. Of these students, just about half (49.9%) were educated for most of their school day, or 79% of the day, in the general education classroom. The inclusion of students with disabilities in general education classrooms comes at a time when teachers are feeling the pressure from the reauthorization of *No Child Left Behind* to raise students' achievement levels in various subject areas. The trend with inclusive educational practices due to the IDEA requirements for least restrictive environments suggests that students with multiple disabilities will be increasingly present in the general education classroom (Byrnes, 2008).

The public demand for better K-12 teaching has forced teacher education programs to review their role in enhancing teacher quality. While defining teacher quality has been problematic and vague, three terms are used in the literature: *highly qualified, effective teacher,* and, *good teacher*, none of which adequately summarize the complexity of teacher quality (Liston, Borko, & Whitcomb, 2008).

Within the context of the No Child Left Behind (NCLB) legislation, the Federal government defines the term *highly qualified teacher* as a teacher who has a bachelor's degree, a state teaching certification or a passing score on the state teacher licensing examination, and documented subject matter knowledge (Hess & Petrelli, 2006). Critiques argue that this definition focuses only on teacher characteristics and qualifications, sets a minimum for teacher knowledge, but places no regard on teacher practice (Liston et al., 2008).

The term *effective teacher* generally refers to teachers' impact on student achievement. Again, within the context of No Child Left Behind, *teacher effectiveness* is defined as "teachers' ability to improve student achievement as measured on standardized tests" (Commission on No Child Left Behind, 2007). This focus on achievement outcomes is a shift from the definition of teacher quality that focused on qualifications.

Perhaps the term *good teacher*, as vague and common as it is, describes what teacher education programs identify with most closely when determining teacher quality. Good teaching, grounded in teaching practices, describe the facilitator (the teacher) as one who connects learners with the world around them including the ideas and the people, ultimately shaping the lives of the learners. A good teacher is passionate, views students as a resource, is engaged, attentive and participating and at the same time holds the student accountable for learning and understanding the information (Liston et. al, 2008).

The terms good teacher/teaching and effective teacher/teaching will be used interchangeably in this discussion. The reader can assume that, based on the characteristics described previously, an effective teacher/teaching is synonymous with a *good teacher/teaching*.

High stakes testing and performance results are readily available to the public, and when the general public sees unfavorable results, the immediate response is to question teacher quality. Is it possible for teacher education programs to identify students who are predisposed to become good teachers? Until recently the term "dispositions" was rarely used in teacher education. In

the 1980's and 1990's information from attitudinal surveys suggested that a caring attitude was necessary in order for a teacher to be a good teacher (Helm, 2006). With the current accountability system measuring teacher effectiveness with qualification and test scores, it appears as though we are risking the very core of what it means to be a good teacher. Wayda and Lund (2005) developed rubrics to address students' suitability for pursuing a teaching career. The key dispositions identified are similar to the principles of the servant leader. The dispositions primarily identified are caring, kindness, integrity, initiative, and skill development. In addition, Armistine (1990) identified other key dispositions necessary for the pre-service teacher to be successful in the classroom; fairness, decency, service, pro-social behavior, honest, humility, trust, empathy, healing, and a sense of community. Therefore, based on the literature, the dispositions necessary for pre-service teachers to become effective teachers, or *good teachers*, are directly correlated to that of the servant leader.

Empirical evidence suggests that a teacher's dispositions are as important for student achievement as pedagogical and content knowledge and skills (Singh & Stoloff, 2008). The National Council for Accreditation of Teacher Education (NCATE) and Interstate New Teachers Assessment and Support Consortium (INTASC) require that teacher preparation programs assess the dispositions of their teacher candidates when determining their effectiveness. The change in demographics of public school students, coupled with the position accrediting bodies take on the importance pre-service teachers' dispositions, has motivated teacher education programs to change how teacher preparation is being facilitated (Hammerness, 2006).

The increased inclusion of diverse learners in the general classroom and the research involving the exploration of teachers' attitudes regarding the academic achievement of diverse students in inclusive classrooms indicates that teacher education programs must, not only improve pre-service teachers' knowledge of a wide range of disabilities, but also cultivate positive and accepting attitudes toward inclusion. According to Delar Singh (2006) there is no sufficient empirical evidence to conclude that the needs of all children can be met in the general education classroom. Yet there is evidence that suggests general education teachers do not believe they are fully prepared for the inclusion of students with disabilities. Because knowledge and skills in implementing inclusive practices for students with disabilities are preceded by attitudes and beliefs, teacher education programs must provide curriculum that the impacts pre-service teachers' attitudes toward inclusion of diverse learners.

PURPOSE OF THE STUDY

This study investigates the effects of service-based diversity training on pre-service teachers' attitude regarding the inclusion of diverse learners in the general education classroom. The purpose of this research project is to determine whether or not the offering of one service-based course in diversity in a teacher education program at one university in North Carolina impacts pre-service teachers' attitudes toward teaching diverse student populations in the general

education classroom. The intended outcomes of this research study are recommendations as to how to properly prepare pre-service teachers with regard to diverse learners. The dynamic field of education is counting on quality research on teacher preparation in order to guide curriculum changes to meet the needs of pre-service teachers and future students in our educational system.

RESEARCH QUESTION

The study was designed to answer the following research question: How does a one three-semester hour service-based introductory course in diversity affect pre-service teachers' attitude toward the inclusion of diverse learners in a general education classroom? Null Hypotheses as related to Research Question:

1. Undergraduate students who participate in a three-hour service-based course in diversity will not have significantly different attitudes toward inclusion of students with disabilities than those who do not participate in the course.
2. Undergraduate students who participate in a three-hour service-based course in diversity will not have significantly better understanding of the benefits of integration of students with disabilities in the general classroom than those who do not participate in the course.
3. Undergraduate students who participate in a three-hour service-based course in diversity will not have significantly different attitudes about integrated classroom behavior management than those who do not participate in the course.
4. Undergraduate students who participate in a three-hour service-based course in diversity will not have significantly different attitudes about their perceived ability to teach students with disabilities than those who do not participate in the course.
5. Undergraduate students who participate in a three-hour service-based course in diversity will not have significantly different attitudes about the qualifications of general versus special educators teaching students with disabilities than those who do not participate in the course.

IDENTIFICATION OF VARIABLES AND DEFINITIONS

The requirements of this study included use of variables and other terms, which were used to formulate the purpose, research question, hypotheses, and methods for this study.

1. *Diverse learners* - This term served as the independent variable. Students who are formally identified under current IDEA legislations as having high-incidence disabilities such as mildly intellectually disabled, learning disabled, or mildly emotionally disabled, as well as those having more severe learning challenges related to these three areas.

2. *General Education Classroom* - While this term is not a variable, it is critical to understanding the focus of this study. The general education classroom is the classroom

in which typically-developed students receive their education according to the state standards. In this study, the subject matter of the general education classroom is not specified as participants in the study were enrolled in several different licensure areas.

3. *Service-based introductory diversity course* – the introductory course in diversity participation in an introductory course in diversity, which includes both course work and field experiences, is the independent variable in this study. The course is designed to give the students a broad base of knowledge and skills to work with diverse learners, both culturally diverse and disabled students. The intent of the course is to improve pre-service teachers' attitudes toward the inclusion of culturally diverse and disabled students in the general education classroom. The pre-service teacher will study the heritage and culture of high incidence ethnic groups and exceptionalities, as well as principles and strategies that are effective for diverse learners in a general education classroom. The service based portion of the course includes a minimum number of hours spent with diverse students in a school setting, as well as participation in a group project based on the identified needs of the school.

4. *Demographic Variables* - The gender, age, and race of the participants was determined by self-report of the participants on a brief survey instrument. Also, various aspects of the participants' background were used as independent variables to control for the effect of these factors on the outcomes of the study.

    a. Gender was identified dichotomously as male or female.

    b. Age was identified as a ratio variable as number of years.

    c. Race was categorized as White/Caucasian, Black/African American, Hispanic/Latino, Native American, Asian, and other. Statistically the variable is defined dichotomously as White and Non-White.

    d. Licensure Area was identified categorically as the licensure area the student has declared on their official university record. The licensure areas include; Elementary Education, Special Education, Secondary Education, K-12 Health and Physical Education, and K-12 Music Education. Statistically licensure area is defined dichotomously as Elementary Education and other.

    e. Participation in the service based introductory course in diversity was identified dichotomously as the completion of EDUC 322 Diversity in Education (Yes or No)

    f. Participants were asked to identify nominally the number of classes completed in Education, Health and Physical Education, and Special Education over the 400 level. The level 400 is indicative of all methods courses that focus on pedagogical concepts in order to implement developmentally appropriate curriculum standards and concepts. All courses above the 400 level have field experiences included which are a minimum of 15 hours of practical teaching experience at local schools. Course catalogs that included the course listings were provided for participants to identify classes they had completed at the time of the survey.

g. Background information was collected by identifying dichotomously whether or not the participant was exposed to diversity when growing up, ordinally by income level when growing up, nominally where in the United States the participant grew up and finally dichotomously whether or not they were educated in a private or public k-12 setting. Participants were asked whether or not they were exposed to people who were ethnically different than themselves, people with disabilities, and people with different socioeconomic status. If the participant answered yes to any of the above statements, they then identified how often (daily, weekly, monthly, or yearly) this exposure occurred. Parental income was identified as ranges of annual income in intervals from less than $25,000 to more than $100,000. Sections of the United States were provided for the participant to identify where in the United States they grew up or spent most of their life. Educational experience was determined by asking students if the majority of their K-12 experience was private school, public school or home school.

LITERATURE REVIEW

Diversity in Today's General Education Classroom: With the recent emphasis on the globalization of America changing the face of our public schools, pre-service teachers must be armed with the tools necessary for dealing with the increasing diversity within the classrooms in schools. How to prepare teachers to best deal with the growing diversity in their classrooms so that all students are educated equally is a question teacher education programs are faced with?

Disabilities: Diverse learners also include students with disabilities. According to the *U.S. Department of Education, National Center for Education Statistics* (2006), in the 2003-2004 school year 13.7% of the entire United States school population had a disability identified under PL 93-142, also known as Individual with Disabilities Education Act (IDEA). Of this 13.7%, over half (52%) were spending more than 80% included in the regular classroom (U.S. Department of Education, National Center for Education Statistics, 2007).

As greater numbers of K-12 students with disabilities are included in general education classroom, it is imperative that all teachers develop attitudes and beliefs that are supportive of inclusion teaching practices. High-level beliefs about knowledge and learning, or epistemology beliefs play an important role in successful inclusive teaching (Silverman, 2007). Teachers with this high-level belief are more likely to persist in including students with disabilities fully into class activities (Cook, 2002). Therefore it seems more likely that students with disabilities whose teachers view them positively are more likely to thrive and succeed in general classroom settings.

Schools across the United States are moving toward the inclusion of students with disabilities into the general education classroom. The Least Restrictive Environment (LRE) provision of Individuals with Disabilities Education Improvement Act (IDEA) requires schools

to educate students with disabilities with their non-disabled peers to the greatest extent possible (Singh, 2006). According to the *Twenty-seventh Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act* (United States Department of Education, 2003), in 2003 ninety-six of students with disabilities were served in regular school buildings. Of these students, just about half (49.9%) were educated for most of their school day in the general education classroom. This means they were outside of their assigned general education classroom for less than 21% of the school day.

The inclusion of students with disabilities into general education classrooms comes at a time when teachers are feeling the pressure from the reauthorization of *No Child Left Behind* to raise students' achievement levels in various subject areas. The trend with inclusive educational practices due to the IDEA requirements for LRE suggests that more students with multiple disabilities will be present in the general education classroom (Byrnes, 2008). This trend, coupled with the reality that more and more students in American classrooms are ethically/racially and socio-economically diverse, requires that those entering the field of teaching are effective at facilitating complex material to a group of students with a wide-range of academic and social needs (Darling-Hammond, 2006).

The Role of Teacher Education Programs: Teacher quality is at the center of policy discussions about public education in the United States. The role of the effectiveness of teacher education programs in developing high quality teachers has drawn attention in recent years. However, the teacher accountability movement began in the 1980s (Klein, 2008). These issues are pertinent not only because every child deserves to have quality teachers, but also because several initiatives have listed teacher quality as a major factor in improving student achievement. Publications sparked by the teacher accountability movement include *A Nation Prepared: Teachers for the 21st Century* by The Carnegie Task Force on Teaching (1986) and *What Teachers Should Know and Be Able to Do* by The National Board for Professional Teaching Standards (NBPTS) (1989) (Klein, 2008). Initiatives that brought national attention and focus to the effectiveness of teacher education programs include Federal mandates with the Tide II-Higher Education Act (HEA) (2001), Goals 2000: Educate America Act (1994), and the No Child Left Behind Act (2002) (Brewer, 2006). Increased public concern fueled by external mandates have brought about the changes in new content standards, changed university curricula, and state licensure requirements, and finally the increased emphasis on the identification and assessment of teacher dispositions (Klein, 2008).

Teacher accountability and student achievement have forced teacher education programs across the country to evaluate existing programs and re-envision new programs that prepare teachers to be literate about the students they are teaching. How to best prepare teachers to meet the demands of the changing area of public education is an issue for teacher education programs, not only because of the need to prepare the most qualified teachers, but also because of mandates by accrediting agencies such as the National Council for the Accreditation of Teacher Education (NCATE, 2006).

The public demands for better K-12 teaching, as well as the growing diversity in the general education classroom, have forced teacher education programs to review their role in enhancing teacher quality. In revisiting their "learn to teach framework" as it relates to diversity, teacher educations programs can focus on three distinct areas: the conceptual framework, the course work, and field (Valentíin, 2006).

Conceptual framework. A teacher education programs identifies, through empirical studies and theoretical research aligned with the vision and mission of the entire university, a conceptual framework which serves as a guide to the development curricular experiences that will produce highly qualified professional teachers (Danielson, 2007). Due to the complexity of teaching, a framework for professional practice allows for teacher education programs to organize and structure their programs of study to ensure that pre-service teachers become proficient in the knowledge, skills and dispositions needed to become successful teachers (Darling-Hammond, 2006).

Specifically related to preparing pre-service teachers to be successful with the infusion of diverse learners in the general education classroom, the teacher education program can use their conceptual framework as a means through which the level of commitment the program has to diversity is determined (Valentíin, 2006). For example, the conceptual framework for the teacher education program with specific goals and objectives written throughout dealing directly with diversity emphasizes the importance of identifying knowledge, skills and dispositions pre-service teachers must be able to exercise in the profession of teaching (Danielson, 2007).

Courses. The next level of commitment to diversity occurs when developing specific course offerings throughout the program of study. A teacher education program may offer one-stand alone course in diversity or provide for the infusion of diversity concepts in several core courses. According to the research, there are benefits to both models. As indicated in a study by Milner, Flowers, Moore, Moore III, & Flowers (2003), the completion of a single course in multicultural education can positively impact the attitudes of the pre-service teacher with regard to the inclusion of diverse learners in the general education classroom. However, the stand-alone class did not significantly impact the pre-service teachers' attitude with regard to the inclusion of multicultural education concepts in curricula, learning environments or assessments. Brown (2004) and Middleton (2002) also indicate significant improvements in pre-service teachers' attitudes, beliefs and commitments regarding the awareness of diversity in the general education classroom. In this study, however, this change in personal and professional beliefs did not transfer to the necessary skills needed to enable a diverse group of students to learn complex material in the classroom.

Teacher education programs must determine if the desired outcome is for the pre-service teachers to develop increased awareness with regard to diversity, or to become culturally responsive teachers (Valentíin, 2006). Stand-alone courses in diversity are the beginning to raising the diversity awareness of pre-service teachers. The transition to culturally responsive teaching occurs with the exposure to diverse students during field placements (Darling-Hammond, 2006).

Field placements.   With the creation of a coherent set of learning experiences that expose students to the nature of diverse learners in an actual classroom setting, teacher education programs are challenging the traditional models of operation for undergraduate teacher education programs. The "learn to teach framework" is extending into the walls of the local schools and onto the shoulders of the in-service teachers and administrators of the local education agencies. The teacher education program must work closely with the local schools in order to ensure the experience is valuable for the preparation of the culturally responsive teacher (Danielson, 2007).

In addition to diversity in education courses, pre-services teachers must have the opportunity to work with diverse students in the classroom. Teacher education programs must periodically examine field placements to ensure that placements for pre-service teachers are truly diverse, and that the placements provide the pre-service teacher with realistic teaching scenarios (Valentíin, 2006). According to Darling-Hammond (2006), effective teacher education programs have a "tight coherence and integration among courses and between course work and clinical work in schools" (p. 306).

Teachers Attitudes toward the Inclusion of Students with Disabilities: As greater numbers of K-12 students with disabilities are being included in general education classroom, it is imperative that all teachers develop attitudes and beliefs that are supportive of inclusion teaching practices. A review of research indicates three major factors are necessary in order for teachers to possess positive attitudes toward inclusion. Teachers must believe that students with disabilities can learn and achieve to the best of their abilities. They must have a strong sense of self-efficacy for teaching students with disabilities in an inclusive setting. Lastly, general and special educators must view one another as equal, mutually supportive partners in educating all students (Silverman, 2007).   It is important to note that complexities surrounding the concept of inclusion and teacher attitudes toward inclusion are not straightforward, and depend on a constant interplay of several factors not limited to those mentioned previously (Hsien, 2007).

High-level beliefs about knowledge and learning, or epistemological beliefs play an important role in successful inclusive teaching (Silverman, 2007). Teachers with this high-level belief are more likely to persist in including students with disabilities fully into class activities (Cook, 2002).   Therefore students with disabilities whose teachers view them positively are more likely to thrive and succeed in general classroom settings.

In a study to determine the level of epistemological beliefs and attitudes toward inclusion among a sample of pre-service teachers, and the extent to which pre-service teachers' attitudes toward inclusion correlates with their epistemological belief status, Silverman (2007) confirmed that "teachers who hold more positive attitudes toward inclusion also tend to hold higher-level epistemological beliefs" (p. 47). This finding has implications for teacher education programs in that fostering the development of high-level beliefs regarding knowledge and learning may also promote positive attitudes toward inclusion.

The second factor teachers must possess in order to have positive attitudes toward inclusion is a strong sense of self-efficacy for teaching students with disabilities in an inclusive setting. Both generalized and personal dimensions of self-efficacy are related to this factor. The

generalized aspect refers to individuals' expectations that teaching can influence student learning, whereas the personal aspect refers to individuals' beliefs that they themselves have the skills necessary to facilitate student learning (Wolters & Daugherty, 2007). Simply stated, self-efficacy in this context relates to a teacher's confidence that he/she possess the skills to teach students with disabilities effectively (Silverman, 2007). Teachers with high self efficacy are significantly more willing to adapt curriculum and instructions, and are more patient and flexible with students with disabilities (Cook, 2002). According to Woolfolk & Hoy (1990) (as cited in Brownell and Pajares, 1999), teachers with low self-efficacy tend to give up on students who do not learn quickly and easily, hold a pessimistic view of student motivation, and have a rigid classroom management style.

Research studies have shown that general educators have apprehension with regard to their ability to meet the needs of children with disabilities, as well as about the practicality of inclusion practices (Romano & Chambliss, 2000). Further studies suggest that although teachers may have positive attitudes regarding inclusive educational practices, a teacher's willingness to accept the included student varied with the severity of the disability (Campbell, Gilmore, & Cuskelly, 2003).

Several investigators have explored general educators' attitudes toward students with disabilities and how teacher education programs are training future teachers for inclusive educational practices. Wolters and Daugherty (2007) explored teaching experience and grade level with regard to self-efficacy as it relates to instructional strategies, classroom behavior management, and engagement. Results suggest that beginning teachers need support, training, or supervision in order to increase self-efficacy. Specifically, trainings experiences designed to increase teachers' confidence in their ability to use varied and effective features of instruction and assessment (Wolters & Daugherty, 2007). Hasting and Oakford (2003) validated, as previous research has long suggested, that a teacher's attitude of acceptance of children with special needs in their classroom is crucial to that child's success, and to the success of inclusion programs. They investigated student teachers attitudes towards the inclusion of children with intellectual disabilities, and children with emotional and behavioral problems. Results indicated that a student teachers' training in an undergraduate program was as important as the children's special needs category in determining attitudes with regard to inclusion (Hasting and Oakford 2003).

THEORETICAL FRAMEWORK

Social Constructivism: Current research in teacher education, the increasing diversity in the American classroom, and the study of learning theory support the use of Lev Vygotsky's theory of social constructivism as the foundation of this research. Constructivist theorist (Piaget, Dewey, and Vygotsky) maintain that "learners arrive in any learning situation with a range of knowledge and experience that will influence how they respond to new information" (Hyslop-Margison & Stobel, 2008, p. 78). Therefore, pre-service teachers not only arrive in teacher preparation programs with a lifetime of experiences with regard to social interaction that has been, more than likely, monitored closely by their parents, but also almost two decades worth of

experiences and perceived knowledge about classrooms, schools, and education. Teacher Education programs, in order to meet the increased demands of teacher quality, must discover what the pre-service teachers already believe and then create the required cognitive dissonance that will result in a shift in paradigm of their conceptual understandings of diverse learners(Hyslop-Margison & Strobel, 2008).

Social constructivism supports that knowledge is a socially negotiated product; simply stated Vygotsky's theory of social constructivism maintains that knowledge is constructed through cooperating and understandings with others and not solely generated by individuals (Hyslop-Margison & Strobel, 2008). Social Constructivism espouses three assumptions which include culture, language, and social interactions (Louis, 2009). Vygotsky's theory proposes that cognitive development occurs through these three elements, of which culture is the most important. However, language and social interaction are the means through which "culture drives cognitive development" (Louis, 2009, p. 20). Teacher education programs, therefore, must prepare pre-service teachers to understand the developmental level of the learner, as well as the socio-cultural environment within which the learner functions. However, as with all learning, the pre-service teacher must understand themselves and others around them before they can learn more global concepts such as curriculum, best practices and pedagogy for learning (Powell & Kalina, 2009).

Based on the theory of social constructivism, effective social interaction for cognitive development is fostered through three concepts; Zone of Proximal Development (ZPD), Cognitive Scaffolding, and psychological tools (Louis, 2009). Vygotsky uses ZPD as a term for the range of tasks that are linked to the learner's psychological functions as development takes place (Powell & Kalina (2009), Santruck (2006), Schuerman (1995). This is explained as the optimal learning zone where students are given tasks that are too difficult to complete alone but successfully completed with the guidance and assistance from someone more knowledgeable (Louis (2009). Vygotsky believes that culture is a by-product of human social interaction. Therefore, when a learner actively constructs knowledge in a social context, this optimal learning zone has the potential to transform the learner's cultural reality (St. Pierre Hirtle, 1996).

With regard to the pre-service teacher, the ZPD refers to aim toward the pre-service teachers' potential development rather than the current ability. Specifically related to this research, ZPD posits that with guidance and assistance from teacher education programs, pre-service teachers can gain the cognitive skills as well as the epistemological belief to educate all students equally by recognizing and embracing the individual differences of their students. This is represented in the practice of pre-service teachers overcoming hurdles related to diverse learners while learning to teach, and captures epistemological changes in pre-service teacher's pedagogical thinking as it develops throughout the course of study (Scheurman, 1995).

The second concept, scaffolding, is a process that supports ZPD. Cognitive scaffolding refers to a progression of learning that takes places when the learner achieves independence from others (Beck, 2008). According to Vygotsky's social constructivism theory, an intentional support system put in place will ultimately allow the learner to successfully complete tasks that have meaning to them (Powell & Kalina, 2009). In regard to teacher education programs, as pre-service teachers complete courses and move onto more complex issues related to pedagogy,

cognitive development is greatest if the level of assistance is large at first and then gradually reduced as the pre-service teacher progresses through the course of study. As the pre-service teacher completes coursework, cognitive development will only occur if the upper-level courses are more complex and force the pre-service teacher to enter a new ZPD (Louis, 2009).

The third and final concept found within Vygotsky's social constructivism theory is that of psychological tools. Examples of psychological tools which are used to examine the environment and interact socially include written and oral language (Louis (2009), Santruck (2006), Powell & Kalina (2009). According to Powell and Kalina (2009), communication and language usage enable the learner to develop a more complex understanding of the world around them and are the most important process in the social constructivist setting. From this point of view, teacher education programs must maintain the teacher educator-pre-service teacher relationship through formal and informal communication in order to provide the pre-service teacher the opportunity to reflect on motivation, self-image, and to ultimately enhance learning (Beck, 2008).

The theory of social constructivism is based on the notion that cognitive skills have origins in social interactions and are embedded in the wider environment within which we live (Santruck 2006). Also, social interactions with other students and teachers along with personal or individual critical thinking generate ideas and knowledge. Therefore to prepare pre-service teachers to become more culturally literate, or improve cognitive skills directly related to the diverse learner, teacher education programs should provide a program of study with emphasis on systematically developed social interactions with diverse learners, varied activities with extensive use of language (reading, writing, and speaking), opportunities for collaboration as tasks and abilities permit (Louis, 2009).

Through the use of Vygotsky's social constructivism, teacher education programs can use scaffolding to assist pre-service teachers with the completion of tasks within their Zone of Proximal Development. Through this, the pre-service teacher will acquire the necessary psychological tools needed to explore their environment and interact with diverse learners.

Social Constructivism adapts the learning process by transforming the learner from a passive recipient of information to an active participant. (Kok-Aun Toh, Chew, & Riley II, 2003). Rather than obtaining information from teacher or textbook, the learner (which in this case is the pre-service teacher), is guided by the teacher educator in the construction of and processing of new knowledge. As mentioned previously, the pre-service teacher comes with decades of experiences and prior knowledge that, according to social constructivism, must be linked to new knowledge through meaningful social interactions. (Alesandrini & Larson, 2002). In essence, according to Kok-Aun Toh et al. (2003), "learning involves the rejection of pre-existing knowledge for new knowledge (p. 202). Specifically related to pre-service teachers and diverse learners, the new knowledge must be intelligible (fully comprehended), plausible (believable and consistent with pre-existing knowledge), and fruitful (something of value) (Hyslop-Margison & Strobel, 2008).

According to social construct theory, social interaction and culturally organized activities are necessary in teacher education so that pre-service teachers can develop properly with regard to diverse learners (Powell & Kalina, 2009). With the scaffolding approach, the teacher educator is the person with more knowledge than the pre-service teacher therefore they must be involved in the prescribed activities. This allows for the pre-service teacher to experience their own level of understanding of diverse learners and seek the assistance of the teacher educator in order to complete the more complex tasks related to equally educating all students (Powell & Kalina).

Pre-service teachers, in order to critique and transform current social conditions that exists in public schools today with regard to marginalized students, must substantially understand what the conditions are for diverse learners, how these conditions developed, what possible alternative exists, and how to reshape the conditions (Hyslop-Margison & Sobel, 2008). Therefore, using extensions of conventional teaching strategies will not facilitate learning with regard diverse students. Pre-service teachers need to learn take a more humanistic and constructivist approach to teaching to meet the diverse needs of these students (Gray and Fleischman, 2004). In order for teacher education programs to prepare pre-service teachers for effective social interaction with diverse learners' one theme being infused is that of Servant Leadership.

Servant Leadership: Servant Leadership is not a recent concept or fad but a philosophy with rich historic roots as old as the scriptures. The term was coined in a 1970 essay by Robert Greenleaf (as cited in Spears, 2004) and has been the springboard for the evolution of leadership in many facets of today's' society including businesses, schools and churches. The idea of servant as leader, at the very core of its meaning, includes the premise that true leadership stems from a deep desire for one to help and serve others (Spears, 2004). The servant leader is driven by the deep satisfaction he/she feels from making a difference, and from making sure the needs of others are being served first and foremost. Some of the principles of servant leadership include humility, honesty, trust, empathy, healing, community, and service (Bowman 2005).

The profession of teaching is readily paralleled to the concept of servant leader. According to research (Hammerness, 2006), the motivating factors for teachers entering the profession are intrinsic, extrinsic and altruistic. Studies showed overwhelmingly that pre-service teachers' perception of their teaching abilities, the intrinsic career value of teaching and the prior teaching and learning experiences highly influenced the decision to choose teacher education. Federal policies, low salaried wages, and the disappointments and hardships of teaching do not change the important work of teachers. From the first day of their career to their final exit, teachers connect with students personally and make differences in the individual lives of students.

Servant leadership emphasizes collaboration, trust, empathy and an ethical use of power. By nature, the servant leader embarks on a process of transforming the environment within which he/she chooses to serve. Patterson (2003) (as cited in Waddell, 2005) describes a theory in which the servant leader is guided by virtuous constructs of which the first is "*agapao* love".

The Greek word *agapao*, "refers to a moral love, doing the right thing at the right time for the right reason" (Winston, 2002). Connecting this concept directly to teaching, the basis for *agapao* love would be to consider each student as a total person with needs, wants and desires. Patterson (2003) (as cited in Waddell, 2005) suggests that *agapao* love is consistent with servant leadership to the extent that servant leaders "must have such great love for the followers that they are willing to learn the gifting and talents of each one of the followers" (Waddell, 2005). The leader, which for the purpose of this discussion is the teacher, would focus on the student first and take care of the students needs before anything else. A teacher's primary function is to serve others. Teachers do not teach for material outcomes nor to fulfill selfish needs, but because of the willingness to demonstrate *agapao* love to students and partake in the awesome responsibility to care for and serve the students who have been entrusted to them.

The test of these principles in the classroom today is to address the impact teachers have on students by asking, "Do those served grow as persons? Do they, *while* being served, become healthier, wiser, freer, more autonomous, and more likely themselves to become servants?" (Greenleaf, 1977). A good teacher, with the framework of Servant Leadership, will answer, "Yes."

Strategies Used in Teacher Education Programs: Teacher education programs are faced with identifying and developing theoretical frameworks and pedagogical strategies to impact teacher attitudes and sense of self-efficacy toward diverse learners in the contemporary classroom. These strategies include service learning, reflection, and collaboration as key strategies.

Service Learning: In order for teacher education programs to teach particular virtues, pre-service teachers must be made aware of the key dispositions, and these dispositions must be modeled throughout the program of study (Helm, 2006). Field experience is extremely important for observation of such dispositions within the environment within which the pre-service teacher will serve. Service–learning in teacher education has noticeably increased over the last decade. According to a survey in 1998 by the National Service Learning in Teacher Education Partnership, "nearly one fifth of the teacher education programs in the nation offer service-learning opportunities and many others were interested in developing these programs" (Vaughn, Seifer, & Mihalynuk, 2004).

According to the National and Community Service Trust Act of 1993, service learning is a "teaching strategy by which students learn and develop through active participation in a thoughtfully organized service" (Geleta & Gilliam, 2003). Service learning enriches educational objectives while engaging students in meaningful experiences. It allows pre-service teachers to connect what they are learning in the classroom to an identified community need which enhances both the community within which the student serves as well as the personal and professional growth of the student (NCATE, 2002).

There are distinct differences between service learning, community service, internships and field practicum. Community service has a primary focus of providing a service (direct or

indirect) to a service beneficiary while internships and field practicum focus on students' learning with the primary beneficiary being the service provider. Service learning, on the other hand, blends the key elements of both community service and internships so both the provider and the recipient benefit (Anderson, 1999).

The value of applying knowledge gained in classroom content to real life situations is central to service learning. It allows students the opportunity to "internalize and experience content first-hand" (Geleta and Gilliam, 2003). This approach equalizes the concept of service being provided and the learning that is taking place. The benefits of infusing service learning with instruction of pre-service teachers include the obtainment of knowledge and skills necessary to facilitate effective learning experiences (Vaughn et. al 2004).

While research indicates that subject matter knowledge is necessary for effective teaching, knowing content alone does not make one an effective teacher. The pre-service teacher needs the content knowledge and the skills in *how* to teach the subject matter (Goldhaber, 2006). An example of service learning in teacher education that would improve teacher effectiveness with regard to content is pre-service teachers enrolled in a language arts methods class tutoring diverse learners at a local elementary school on various linguistics skills. The gains from this experience are two-fold. First the diverse learner gains extra time for skill development. Second, the pre-service teacher is provided the opportunity to use appropriate instructional techniques for diverse learners, improves content knowledge related to language, reading and writing, and also enhances social and civic responsibility in a real life situation.

Service learning parallels the social interaction concepts as discussed in Vygotsky's social construct theory. Through the use of effective social interaction, the creation of relationships between the diverse learner and the pre-service teacher will result in cognitive development (Powell & Kalina, 2009). Through the use of field placement, pre-service teachers have the opportunity to take an active role in the construction of knowledge as well as the development of concepts and deep understanding through authentic tasks regarding diverse learners (Yilmaz, 2008). The creation of a constructivist learning environment, which includes service learning, the pre-service teacher has the opportunity to develop deep understandings about pedagogy and diverse learners. This will, in theory, assist with forming habits that are mindful of educating all students equally (Yilmaz).

Service learning in teacher education can contribute not only to the development of quality teacher candidates and the community, but also plays an important role in meeting standards for National Council for Accreditation of Teacher Education standards (NCATE, 2002). According to Standard one, "Candidates know and demonstrate content, pedagogical, and professional knowledge, skills, and dispositions necessary to help all students learn" (NCATE, 2002, p. 16). Service learning, as a pedagogical strategy for pre-service teachers placed in schools, supported with critical dialogue facilitated by teacher education faculty, brings students closer to the content and assists with applying such concepts into real life situations (Enos and Troppe, 1996). The value of the educational goal, pre-service teachers increase student

achievement, is linked through service learning, however the focus remains academic with regard to focusing on the curricular standards of the students being served.

Reflection: A critical component of service learning is reflection. Wade and Saxe (1996) defined high quality teacher education programs with service learning as having strong reflective components. For the service learning experience to be successful, the pre-service teacher needs to reflect before, during and after the project is complete (Root, 2000). Such reflection may not only include content knowledge and best instructional strategies for diverse learners, but also honest self reflection that would allow teachers to be cognizant of their own cultural beliefs and how those beliefs affect their actions and teaching practices.

Critical reflection allows the student to take service and turn it into conscious learning (Zlotkowski, 1999). One of the reasons that teacher educators use for integrating service learning into their courses is "to enhance pre-service teachers' ability to reflect critically on current educational practices and their own teaching (Anderson, 1999). Such reflection may include not only content knowledge and best instructional strategies for diverse learners but also honest self reflection that would allow teachers to be cognizant of their own cultural beliefs and how those beliefs affect their actions and teaching practices.

Sobel and Taylor (2005) examined pre-service teachers' feedback about teacher education curriculum and pedagogy grounded in the Professional Development School (PDS) model. The major focus of this study was to research "pre-service teacher's beliefs and behaviors relevant to addressing the needs of students whose backgrounds and abilities differ from their own" (p. 83). The participants were asked to identify: "What elements of the teacher education curriculum and pedagogy affected knowledge and understanding as it relates to multicultural, multilingual, and inclusive classroom contexts?", and "What elements affected your knowledge and understanding of how to provide effective instruction in these classroom contexts" (p. 84). The research results indicated that the pre-service teachers found value in guided exposure to real-world experiences, experiencing the application of theory into practice, and observations and interactions with the clinical teacher (Sobel and Taylor, 2005).

The literature does not suggest a best practice model for implementing service learning into teacher education programs. In order to assist educators in creating high-quality service learning opportunities, a set of principles has been established that can be used as a guide to create a model that meets the variety of situations within which teacher education programs function. The Service Learning Center (2000) identified seven common elements found within the most successful service learning programs; integrated learning, high quality service, effective collaboration, ongoing student voice, promotion of civic responsibility, multiple opportunities for reflection, and intentional evaluation. Also, Root (2000) identified three important elements of integrated learning in teacher education can be identified as the following: 1. The service-learning project has clearly articulated knowledge, skill or value goals that arise from broader classroom and school goals, 2. The service informs the academic learning content, and the academic learning content informs the service, and 3. Life skills learned outside the classroom

are integrated back into classroom learning (Root, 2000). To be of high quality service, a service learning project should respond to a need that is recognized by the community to be served. It should be age-appropriate, well organized, and designed to achieve significant benefits for students and community (Root, 2000).

COLLABORATION

Collaboration amongst the teacher education program and the local community schools is imperative. Setting up professional development school designs or learning communities within schools in order to provide the pre-service teacher appropriate field experience opportunity where they can apply what they have learned in a real-life setting is essential. Without this equal partnership, the future of teacher education and teacher preparation is in grave danger. All partners benefit from the collaboration and contribute to its planning (Trubowitz, 2005).

In order for the pre-service teacher to fully understand and embrace the concept of and pedagogy of service learning, they must have a voice in the planning, implementation, reflection, evaluation, and celebration of the service learning project. When infusing service learning into the class, the teacher educator must be cognizant of the pre-service teacher's knowledge and skill levels with regard to all of these tasks in order for the experience to be most beneficial (Karayan and Gathercoal, 2005).

The civic responsibility, and/or civic engagement, element aims at engaging our pre-service teachers as productive citizens within the community they currently serve, and hopefully the community within which they will continuously serve. Civic engagement is not limited to elementary education (content) and secondary social studies (curricular objectives) licensure areas. In fact, civic engagement encompasses all teacher education majors as it promotes caring for others and contributing to the community, impact on society and making a difference, and acting as a change agent within the walls of the schools as well as society in general (Swick, 2001).

Summary: The public demand for better quality teachers and public K-12 education, the change in accreditation, and the change in the demographics of public school student population have all motivated teacher education programs to change how teacher preparation is being facilitated (Hammerness, 2006). All teachers should be prepared to address the social, cultural, and economic backgrounds of all students and understand the diverse cultural patterns of the students served in the American school system today.   It is one thing for teacher educators to teach content and theory; however, taking that theory and content and putting it into action is another thing altogether. Through modeling and planting the seeds of the principles of servant leadership, and by using high yield strategies such as service learning, reflection, and collaboration, pre-service teachers might be equipped to effectively teach the diverse student population in the contemporary classroom, thus providing for improved teaching practice and ultimately increased student learning.

METHODOLOGY

This study investigated the effects of a 3-semester hour course on pre-service teachers' dispositional attitude toward the inclusion of two groups of students in the general education classroom: culturally diverse students and students with disabilities. The methodological details of this research study include the following: the participants, the description of the setting, the instrumentation, the procedures used for data collection, the design of the study, and the procedures used for data analyses.

The study was designed to answer the following research questions: How does a one three-semester hour service-based introductory course in diversity affect pre-service teachers' attitude toward the inclusion of diverse learners in a general education classroom?

The population identified for this study will consist of students enrolled in the teacher education program at the university the study is being conducted. The experimental group is defined as students that have completed a course titled Diversity in Education while the control group included students who were enrolled in any EDUC, HPED, or SPED course whom have declared education as their major but have not taken the diversity course. The anticipated number of students in the experimental group is 70 and 70-100 teacher education students for the control group.

The research took place at a multi-faceted, United Methodist Church-related university with multiple campuses and delivery systems. The main campus is a 340-acre campus located in a rural county located northeast of Charlotte, North Carolina. The population of the county is just under 60,000 with the major industry being manufacturing. According to the 2008 Census data, 85% of the population is Caucasian, 12% African American, and the remaining 3% are identified at Asian, Native American/Alaskan Native, or persons who reported multi-racial. The undergraduate college serves 500 resident students and 350 commuter students. Students in the undergraduate college earn Bachelor of Arts degrees in 19 majors and Bachelor of Science degrees in 16 majors (Office of Institutional Research and Assessment). While over 80% of the traditional undergraduates are in-state students, students come from 33 states and 28 other countries. On the main campus, 61% of the students are Caucasian, 28.5% are African-American, 2% are Hispanic/Latino and the remaining 6.5% are from other ethnic/race groups (University Fact Book (2010).

While the student body of the university is somewhat diverse; the pre-service teacher candidate pool is not diverse. A majority of the education majors enrolled in the program are white, middle class females. Also, the college is located in a very rural, non-diverse setting. Therefore, the local schools immediately surrounding the university echo the demographics of the area in that most of the students are Caucasian. However, the teacher education program's director of field placement works very closely with the licensure area faculty to ensure that the students are placed in diverse settings for field placements that correlate with specific classes. All field placement hours are built into the courses so that the instructor of the course has to

approve the placement of the pre-service teacher. This procedure ensures that the pre-service teacher is exposed to diverse populations at some point during practicum hours, and that experiences are guided and coherent with theory and practice discussed in course lecture.

The specific course being studied, Diversity in Education (see Appendix A for syllabus), is a required course for all undergraduate teacher education majors. Teacher candidates are advised to take this course during their junior year of study in either the fall or spring semester. In addition, all students enrolled in the course are required to have been admitted to the Teacher Education Program (TEP). Each semester consists of 15 weeks, 45 contact hours (3 SH weekly). Two different instructors taught the course during the three semesters when the study was being conducted, with the instructor during the last two semesters being the same person.

This course is designed to equip prospective teachers with a broad base of knowledge and skills for teaching diverse learners. The pre-service teachers enrolled are required to complete their service hours all at a middle school that houses grades 6-9, and enrolls 532 students. The demographics of the student body where the pre-service teacher completed the service learning requirements are very different from the schools immediately surrounding the university as a large plurality (44%) of the student population is African American, while the remainder are Caucasian (42%), Hispanic/Latino (5%), Asian (5%), and American Indian (< 1%).

According to Education First, NC School Report Cards (2010-2011), the school where the pre-service teachers were placed had 60-80% of students performing at grade level. Additionally, 61.1% of the student population passed both math and reading end of grade tests; well below the district (70.1%) and the State of NC (67.0%). Specifically, 64% of students passed the Reading End-of -Grade test while 85.4% passed the Math End-of-Grade test. For one hour each week, the pre-service teacher candidate would work with an assigned group of identified (by teachers and principal) students whom were at risk either academically or socially.

The pre-service teacher would work with the same students on a weekly basis in order to develop relationships with students as well as to help them with any academic subject needs. Some examples of activities which the pre-service teachers may have facilitated were tutoring for specific academic subject, group study for exam, assistance with homework, and possible critical thinking activities developed by pre-service teacher. To enrich the experience, pre-service teachers were also required to interview students, parents and teachers in order to provide context to the students they would be working with as well as their surroundings (life at home, family, friends..).

INSTRUMENTATION

Pre-service Teachers' Attitudes toward the Inclusion of Students with Disabilities.
Disability refers to broad categories including learning disabilities, students with development handicaps, multiple handicaps, and with severe behavioral handicaps (Cook, 2002). To assess the participants' attitudes toward the inclusion of students with disabilities, the Opinions Relative to Integration of Students with Disabilities (ORI) Scale (Cook, 2002) was

used. (See Appendix B.) The scale is designed to measure responders' attitudes toward the inclusion of students with disabilities in a general education classroom setting. The ORI contains 25 statements. The participants use a 7-point Likert scale to respond to statements regarding various aspects of inclusion. Four factors are addressed in the ORI scale: Benefits of Inclusion, Integrated Classroom Behavior Management, Perceived Ability to Teach Students with Disabilities, and Special vs. Integrated General Education. The validity of the instrument is supported by findings that ORI scores were "significantly and positively related to measures of attitudes toward people with disabilities and were unrelated to respondent sex, age, ethnicity, or education level" (Cook, 2002, p. 266). Cronbach coefficient alpha was reported to be 0.88 for the entire scale.

All of the students involved in the research study will be asked to complete simple demographics surveys that will include information such as gender, age, and race. This is done to determine if other factors related to demographics effect attitudes related to the inclusion of diverse learners.

Demographic Data

All participants completed a simple demographics survey that asked them to specify their age, gender, race, licensure area, exposure to diverse learners when growing up, frequency of exposure to diverse learners when growing up, income level when growing up, location in United States raised, and educational experience. This survey provided a means to disaggregate the data based on these demographics. (See Appendix B.)

Procedures

Upon receipt of IRB the research began. The researcher contacted all students enrolled in the teacher education program by email and other social mediums (Facebook and Falconn, the University's system for dissemination of information to students) to inform them of the research. The researcher visited all courses prefixed with EDUC/HPED/SPED and distributed the informed consent to the students (Appendix C) 1 week prior to data collection. With two weeks left in the semester the students were given the simple demographics survey upon which they identified race, gender, and age and whether or not he/she has taken the EDUC 322 Diversity in Education class. Following the demographics survey during the same class period, the researcher administered the PADAA and the ORI. No incentive was provided for taking the survey. Anonymity assured no risks.

Design

A quasi-experimental nonrandomized control group posttest design was used. The experimental group consisted of pre-service teacher candidates who were either near completion of or who had already completed the introductory diversity course. The control group was randomly selected from the group of surveys of teacher education candidates who had not taken

the course in diversity at the time the research was taking place. This type of research design was chosen because the researcher cannot randomize the experimental group. The posttest only design was chosen, as opposed to the pretest-posttest design, because the research shows that when using attitudinal scales, administration of a pretest can cause pretest sensitization (Ary, D, Jacobs, L., Razavieh, A., & Sorenson, C., 2006).

Data Analysis

The statistical procedure used was independent samples T-test, analyzing the difference in means between the posttests of the participants for both the PADAA and the ORI. The T-test provided the researcher a means to determine if there was a statistically significant difference in the means between the post-test from which inferences can be made as to whether or not the 3 - semester hour course did or did not have impact on the participants' attitudes.

RESULTS

This study investigated the effect of a three-credit hour, service-based course in diversity on pre-service teachers' attitudes toward inclusion of diverse student populations, both culturally diverse and students with disabilities, in the general education classroom. This study focused on pre-service teachers who have completed the course through the use of validated attitudinal instruments and a short demographics survey. The researcher administered an attitudinal survey to students in 15 education prefix courses. The total number of surveys completed was 110, and no student completed the survey twice.

DEMOGRAPHIC AND DESCRIPTIVE DATA

The sample included within this study was a representation of the students enrolled in a liberal arts university in North Carolina who have identified Teacher Education as their major. All students for the spring 2011 semester enrolled in a course with the prefix EDUC, HPED, and/or SPED were invited to participate in this study. Although the researcher may have visited more than one class in which a student was enrolled, students were asked to complete the survey only once. The researcher, during the last 2 weeks of classes, attended all 15 courses with the identified prefixes to administer consent forms and surveys. The total number of surveys completed was 110..

Of the 110 respondents, 70% (77) were 18-25 years of age, 43% (47) had taken the service-based introductory class in diversity, 60% (65) identified Elementary Education as their licensure area, 92% (101) identified as white/Caucasian, and 77% (85) were female. When participants were asked the number of EDUC/HPED/SPED classes at or over level 400 (all methods classes are coded as 400 or higher and the intended curriculum specifies the infusion of diversity concepts) they had taken, 49% (55) of the participants reported they had taken none (0);

13% (14) reported that they had taken two (2); 8% (9) reported that they taken three (3); and 30% (21) reported that they had taken four (4).

Eighty-five percent (77) of the participants reported that they had grown up (spent more than 10 consecutive years) in the Southeast, 41% (45) grew up with an average household income of $51,000 or higher, and 93% (102) reported that they had attended public school during K-12.

Participants were also asked if they were exposed to diversity when growing up, and if so, how often. With regard to ethnic/racial diversity, 90% (98) of participants indicated exposure to people of different ethnical/racial backgrounds when growing up, with 83% (93) indicating frequency of more than once a week. Eighty-eight percent of pre-service teachers reported were exposed to people with disabilities, when growing up,, with 70% indicating frequency of more than once a week. Finally, participants were asked if they were exposed to people with different socioeconomic status. Ninety-five percent (104) indicated they were. Eighty-nine percent (98) indicated this exposure occurred more than once a week.

The researcher performed analysis to test each of the null hypotheses. The results are organized by the instrument as well as sub-scores of the surveys.

Levene Homogeneity of Variance Test

Prior to running the independent t-tests, the researcher chose to conduct Levene Homogeneity of Variance test in each of the test groups (taken the class and not taken the class based on each factor). The purpose of the Levene Homogeneity of Variance test is to ensure that the assumption of equal variance is valid. In order to assume that all groups are of equal variance, the significance level had to be above 0.05. The researcher reviewed the information to determine if the difference between the two groups was significant ($<.05$) in order to determine which group to use (assumed or not assumed). After reviewing the information from SPSS and performing the Levene Test for Homogeneity of Variance, all but two groups were above the 0.05. Therefore, the independent sample t-tests were performed assuming homogeneity. The two instances in which the Levene's Tests for Homogeneity of Variance were below .05 were in ORI Factor 1 and ORI factor 4.

Opinions Relative to Integration of Students with Disabilities (ORI)

The ORI Composite score was computed by positively scoring the 12 items that are worded negatively, and adding a constant of 75. The scores range from 0-150 with the higher score representing a more favorable attitude toward the integration of students with disabilities into a general education classroom. The ORI is also divided into four (4) subscales: Benefits of Inclusion, Integrated Classroom Behavior Management, Perceived Ability to Teach Students with Disabilities, and Special versus Integrated General Education. Specific questions are assigned to each subscale area. The sum of the positively scored items was used and a range of

scores determined the value the respondent placed on the area. Independent sample t-tests were run for the composite score, and for each of the subscales. The results are as follows.

Composite score (ORI). Hypothesis 1: Undergraduate students who participate in a three-hour service-based course in diversity will not have significantly different attitudes toward inclusion of students with disabilities than those who do not participate in the course. Table 1 shows mean composite scores for both independent groups: those who participated in the diversity course and those who did not participate in the diversity course.

The scores indicate that the respondents that completed the three-semester hour service based introductory course in diversity scored higher than the respondents that did not in the ORI composite score. Therefore, they have a slightly more favorable attitude toward the inclusion of students with disabilities into the general education classroom.

Table 1
Mean Scores for ORI Composite Score

	Have you taken Diversity in Education	N	Mean	Std. Deviation	Std. Error Mean
ORI results	Yes	47	94.83	15.439	2.252
	No	63	87.97	18.097	2.280

Table 2 shows that, based on the independent samples t-tests analyses, the difference in the means was statistically significant at the .05 level.

Table 2
Independent Samples t-tests Results for ORI Composite Score

		Levene's Test for Equality of Variances		t-test for Equality of Means						95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference		Lower	Upper
ORI results	Equal variances assumed	1.617	.206	2.092	108	.039	6.862	3.280		.361	13.362

Based on the information presented, the researcher rejects the null hypothesis.

Benefits of integration (ORI Factor 1). Hypothesis 2: Undergraduate students who participate in a three-hour service-based course in diversity will not have significantly better understanding of the benefits of integration of students with disabilities in the general classroom

than those who do not participate in the course. Table 3 shows the mean for the two independent groups. The scores indicate the respondents had participated in the three-semester hour introductory service-based course in diversity have a slightly higher mean than the respondents who had not participated in the course. Based on this analysis, the pre-service teacher who participated in the course understand and verify the benefits of integration marginally better than those who did not participate in the course.

TABLE 3
Mean Scores for ORI Factor 1

	Have you taken Diversity in Education	N	Mean	Std. Deviation	Std. Error Mean
Benefits of integration	Yes	47	14.02	5.261	.767
	No	63	10.21	7.090	.893

Table 4 shows that based on the independent samples t-test analyses, the differences in the means was statistically significant at the .01 level.

Table 4
Independent Samples t-tests Results for ORI Factor 1

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Benefits of Integration	Equal variances not assumed	4.331	.040	3.240	107.999	.002	3.815	1.178	1.481	6.149

Based on the information presented, the researcher rejects the null hypotheses.

    Integrated classroom behavior management (ORI Factor 2). Hypothesis 3: Undergraduate students who participate in a three-hour service-based course in diversity will not have significantly different attitudes about integrated classroom behavior management than those who do not participate in the course. Table 5 shows mean composite scores for both independent groups.

Table 5
Mean Scores for ORI Factor 2

	Have you taken Diversity in Education	N	Mean	Std. Deviation	Std. Error Mean
Integrated classroom behavior management	Yes	47	6.06	8.573	1.250
	No	63	4.35	8.126	1.024

Table 6 shows that based on the independent samples t-test analyses, the differences in the means was not statistically significant at the .05 level.

Table 6
Independent Samples t-tests Results for ORI Factor 2

		Levene's Test for Equality of Variances		t-test for Equality of Means						95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Integrated classroom behavior management	Equal variances assumed	.320	.573	1.069	108	.287	1.715	1.604	-1.464	4.893

Based on the information presented, the researcher accepts the null hypothesis.

Perceived ability to teach students with disabilities (ORI Factor 3). Hypothesis 4: Undergraduate students who participate in a three-hour service-based course in diversity will not have significantly different attitudes about their perceived ability to teach students with disabilities than those who do not participate in the course. Table 7 shows mean composite scores for both independent groups; those who had participated in the diversity class and those who had not.

Table 7					
Mean scores for ORI Factor 3					
	Have you taken Diversity in Education	N	Mean	Std. Deviation	Std. Error Mean
Perceived ability to teach students with disabilities	Yes	47	.43	2.940	.429
	No	63	-.41	3.532	.445

Table 8 shows that based on independent samples t-test analyses, the difference in the means was not statistically significant at the .05 level.

Table 8									
Independent Samples t-tests Results for ORI Factor 3									
		Levene's Test for Equality of Variances		t-test for Equality of Means					
								95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Perceived ability to teach students with disabilities	Equal variances assumed	3.451	.066	1.321	108	.189	.838	.635	-.420	2.096

Based on the information presented, the researcher accepts the null hypothesis.

   Special versus general integrated education (ORI Factor 4). Hypothesis 5: Undergraduate students who participate in a three-hour service-based course in diversity will not have significantly different attitudes about the qualifications of general versus special educators teaching students with disabilities than those who do not participate in the course.   Table 9 shows mean composite scores for both independent groups: those who had participated in the diversity course and those who had not.

TABLE 9					
Mean scores for ORI Factor 4					
	Have you taken Diversity in Education	N	Mean	Std. Deviation	Std. Error Mean
Special vs. general integrated education	Yes	47	-.68	3.330	.486
	No	63	-1.17	4.412	.556

Table 10 shows that the difference in the means, based on independent samples t-test analyses, was not statistically significant at the .05 level.

Table 10									
Independent Samples t-tests Results for ORI Factor 4									
		Levene's Test for Equality of Variances		t-test for Equality of Means					
						Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
		F	Sig.	t	df				Lower	Upper
ORI4	Equal variances not assumed	7.119	.009	.669	107.978	.505	.494	.738	-.970	1.957

Based on the information presented, the researcher accepts the null hypothesis.

SUMMARY OF RESULTS

After analysis of independent samples t-tests of the ORI, the researcher found significant difference in the means between the ORI composite score and the two independent groups: those who had participated in the diversity course and those who had not. Upon further analysis of the 4 subscales of the ORI, the researcher found statistical difference in the means between the independent groups in one subscale; benefits of integration (ORI Factor 1). Therefore, the researcher rejects null hypothesis 1 (Participation in a service-based introductory course in diversity has no impact on pre-service teachers' perception of their attitude regarding the inclusion of students with disabilities in the general education classroom.).

DISCUSSION

The goal of this research study was to investigate the impact of participation in a three-semester hour service-based introductory course in diversity on pre-service teacher's perception of their attitudes toward the inclusion of diverse learners into the general education classroom. The design of curricular features that help prepare contemporary teachers to teach diverse student populations is a critical task for a teacher education program. The available body of research is mixed as to whether this preparation is best done through the offering of one course in diversity or through the infusion of concepts related to diversity in several courses.

SUMMARY OF THE FINDINGS

Inclusion of Students with Disabilities

The researcher found the completion of the three-semester hour service-based introductory course in diversity had some impact on the pre-service teachers overall perception of their attitudes toward the inclusion of students with disabilities into the general classroom. Specifically, the data showed that the respondents who did complete the class had a slightly more favorable attitude toward to the inclusion of students with disabilities into the general education classroom as opposed to those who did not take the class. Also, the respondents who had completed the class had a slightly better understanding of the benefits of integration of students with disabilities into the general education classroom than those who did not take the course.

Demographic Variables

The researcher found the demographic variables that had a large effect on the pre-service teacher's attitudes toward the integration of students with disabilities included the participation in the three-semester hour introductory service based course in diversity, and the age of the participant. The gender, licensure area, exposure to diverse learners, frequency of exposure when growing up, household income, where in the United States participants were raised, and race/ethnicity of the respondent had little impact on the attitude toward the integration of disabled students. Upon analyses of the demographic variables with regard to the inclusion of diverse learners, the demographic variables had little to no impact on the attitudes toward the inclusion of diverse learners.

DISCUSSION OF THE FINDINGS

All children in the United States, regardless of ability, deserve to have quality teachers. Student learning is the ultimate goal of the teacher. However, many factors intercede with this variable such as student background, teacher attitudes, and how teachers are prepared and licensed in university teacher preparation programs. Where there is no "one size fits all" method

for preparing pre-service teachers, the common goal of teacher education is to prepare teachers to meet the academic standards for all students for whom they are chosen to serve.

A review of the research indicates a mixed response to the effectiveness of offering one course specifically related to diversity or to infuse the concepts of diversity into all classes taken by pre-service teachers. The findings of this study show that the three-semester hour service-based course in diversity impacts the perception of the pre-service teacher's attitude toward the inclusion of diverse learners both with regard to ethnicity and disability. However, changing the attitudes of pre-service teachers is just the first step.

Pre-Service Teacher Attitudes Toward Inclusion of *Students with Disabilities*

According to this study, the completion of the three-semester hour service-based introductory course in diversity had an impact on the pre-service teacher's perceived attitude toward the inclusion of students with disabilities into the general classroom. Specifically the course facilitated a better understanding of the benefits of inclusion. This is one leg of the three-legged stool necessary for successful inclusive practices. The additional legs are a strong self-efficacy toward teaching students with disabilities, and mutual respect between special educators and general classroom teachers.

The results of this study show that the course did not impact the perceived ability to teach students with disabilities. According to research, teachers who understand and believe in integration are more likely to practice inclusive behaviors. Research also indicates increased self-efficacy relates to the willingness to adapt the curriculum and instruction to meet the need of the included student. Therefore, teacher education programs must realize that simply changing the attitude of the pre-service teacher is not enough. The preparation program must facilitate a level of deep self-actualization of the pre-service teacher related to the inclusion of students with disabilities in order to increase pedagogical confidence.

This study also showed that that the completion of the introductory, service-based course had no impact on the pre-service teachers' attitude toward integrated classroom behavior management. Once again this forces teacher education programs to ask that although there was increased understanding of the benefits of integration, is this enough to change instructional strategies in order to serve students regardless of ability.

Preparing Pre-service Teachers for Diverse Learners

According to this research, the pre-service teacher already has an attitude that favors the inclusion of students with disabilities into the general classroom. However, this predisposed favorable attitude is not likely to manifest itself into research-based best pedagogy for diverse learners. Whereas the research is mixed regarding how to change attitudes related to diverse learners enrolled in teacher preparation programs, the research is solid in espousing that teacher education programs have to do more than change attitudes in order for teachers to implement pedagogical practices that support inclusion.

Although the research did not suggest significant differences in data, the researcher still believes that a service-based introductory course in diversity that addresses students with disabilities is important. It allows the pre-service teacher to put into context their attitudes and perceptions of diversity and gain an understanding as to how this relates to being a teacher of diverse learners. Having put the pre-service teachers' personal attitudes regarding diverse learners into perspective will then offer an opportunity for the upper level methodology courses to integrate best teaching practices for the diverse learner. Teacher education programs must continue to focus on and provide courses and experiences that impact pre-service teacher's pedagogical practices so diverse learners are not marginalized in the general education classroom. In addition to a shift in paradigm for teaching diverse learners, this model may also facilitate a deep-self actualization of the pre-service teacher related to the inclusion of students with disabilities.

PRACTICAL IMPLICATIONS

The public demand for better quality teachers and public K-12 education, the change in accreditation, and the change in the demographics of America's public school student population have all motivated teacher education programs to change how teacher preparation is being facilitated (Hammerness, 2006). This study is responsive to addressing these three priorities in American public education. Also, among educational administrators, there is serious concern about the historically high rate of teacher turnover amid the pressures of high-stakes testing and accountability. The novice teacher's success with the diverse population in the general education classroom is undoubtedly a factor in addressing this problem (Darling-Hammond, 2006).

The globalization of the American classroom is not a phenomenon that will disappear. It is the responsibility of teacher education programs across the country to prepare teacher candidates to best serve the students in American schools. With this responsibility comes the challenge of meeting state and national accreditation requirements. The intended outcomes of this research study are recommendations as to how to properly prepare pre-service teachers with regard to diverse learners. The dynamic field of education is counting on quality research of teacher preparation in order to guide curriculum changes that meet the needs of pre-service teachers and future students in our educational system.

STUDY LIMITATIONS

This study had limitations that may have influenced the results. The findings of this research study rely heavily on self assessment which poses a threat to external validity. Other limitations include selection effect (the students are enrolled in a small Methodist Liberal Arts University located in rural NC), setting effect (the schools in which the students are placed for field placement are not be as diverse as one would like for the study to be generalizable), and

history effect (the background of the pre-service teachers). These limitations could not be controlled at any point in the survey.

One final limitation of the research study was the attitudinal surveys used. Both the PADAA and the ORI are brief instruments (19 questions and 25 questions respectively) yet both are measuring very complex concepts. Therefore the thoroughness of the questions may not have addressed the complexity of the issues to the extent necessary.

RECOMMENDATIONS FOR FUTURE RESEARCH

While the research on teachers' attitudes towards inclusion has increased, more needs to be done. The following is a list of recommendations for future research based on the outcomes of this study:

1. The study needs to be replicated using a greater diversity of participants in a less isolated area. This will increase the generalizability of the study, and warrant a higher priority for changes to be made in teacher education programs.
2. Research needs to be done specifically to determine the impact of diverse field placements (ability diverse) on pre-service teachers self efficacy to teach diverse learners? This will further support the conceptual framework of servant leadership being infused in teacher education programs as well as the importance of interactions with diverse learners.
3. How did the attitude of the teacher educator impact the perceived attitudes of the pre-service teacher candidates? Research must be done to determine how the ethoses of teacher educators trickle down to the pre-service teachers being trained to teach in diverse settings.
4. Future research must include how dispositions of the pre-service teacher relate to teaching practices in general education classroom settings. This will strengthen teacher education programs preparation of pre-service teachers to feel more confident in implementing a pluralistic ideology, as well as inclusive programs. In turn, teacher education programs will assist current teachers and schools become more inclusive with regard to ethos, policies and organizations.

CONCLUSION

Teacher quality and the effectiveness of teacher education programs are at the center of several discussions in the education field. These issues, as well as initiatives, external mandates, and educational reform fuel the requirements put forth by accreditation agencies for teacher education programs to equip teachers to be effective with the diverse population in the 21st Century classroom.

A review of the literature and current research of teacher education programs indicates that the dispositions of teachers impact student achievement, therefore teacher quality and the preparation of quality teachers is linked to the disposition of the candidate. Thus, teacher

education programs can no longer focus solely on content knowledge and pedagogical skills; they must identify and assess the dispositions of their teacher candidates. Due to the globalization of today's classroom, dispositions specific to inclusive attitudes are at the forefront of the responsibility of teacher education programs. In addition, the number of students with disabilities receiving a majority of their education in the general education classroom has dramatically increased. Teacher candidates must be appropriately prepared to facilitate learning experiences for all students as the diversity of the students being educated within the general classroom continues to increase.

According to this study, a model that would support the preparation of ability literate pre-service teachers includes the use of a service-based introductory course in diversity followed by upper level programmatic courses that infuse and apply the concepts of diversity and inclusion in order to not only facilitate a change in attitude, but also to change teaching behavior.

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EFFECTIVENESS OF BLENDED LEARNING IN KIPP NEW ORLEANS' SCHOOLS

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ABSTRACT

The newly emerged concept of blended learning is bringing about tremendous change in the way that classroom instruction is delivered. The objective of this study was to examine the thought process, relevant factors, and benefits of implementing blended learning models within the network of KIPP (Knowledge is Power Program) New Orleans schools. The research was conducted using a data-driven model where data was collected and analyzed from surveys pertaining to the implementation of blended learning models in KIPP New Orleans Schools. The survey was distributed via face-to-face method to 186 English, Reading, or Mathematics teachers at nine (9) KIPP New Orleans Schools. 70% of the distributed survey were completed by respondents and contained usable data. The result data analysis shows that overall, 48% of respondents agreed blended learning is higher quality instructional method than traditional face-to-face instruction and that 94% of respondents indicated that blended learning has the propensity to increase scholar success. The results of this study may assist decision makers in considering the benefits of blended learning.

Key Words: blended learning method, technology and learning management

INTRODUCTION

Coming out of Hurricane Katrina, the educational landscape of the city of New Orleans was worse than anyone had ever seen. Schools that were once of high academic quality, that parents strived for their children to get into, disintegrated to a level beyond recognition; this was largely a result of a lack of funding and low enrollment. In the years immediately following Hurricane Katrina, individuals from the education community identified a need for change. A leader of the education reform movement in New Orleans, KIPP New Orleans Schools, was ahead of the pack, opening its first school in August of 2005. Unfortunately, operations quickly ceased due to Hurricane Katrina. KIPP New Orleans Schools re-emerged in 2006 to begin the work they had set out to do before the disruption of the hurricane that changed so many lives.

Over the past seven years KIPP New Orleans Schools (KNOS) has grown to become the leading non-selective Charter Management Organization (CMO) in the city of New Orleans. Operating nine schools across eight campuses in the Greater New Orleans area, KNOS has seen increased enrollment, test scores, and support across its network of schools currently serving

approximately 3,200 public school students in New Orleans, with an ultimate goal of serving 5,300 students (13% of all New Orleans public school students) by 2015.

Due to the fact that there is no single method that successfully teaches all children in a classroom setting, utilizing blended learning models would be a disruptive innovation that would serve as an alternative that would not only improve, but transform the delivery of education across classrooms in what currently stands as nine KNOS schools and across the world.

Students who are enrolled in KNOS schools are referred to as "scholars". Generally, scholars who enter KNOS classrooms from other schools are two to three grade-levels behind. On average, these scholars see academic growth of more than two grade levels in a single year after receiving instruction from KNOS teachers. "In 2011-2012, KNOS scholars outperformed the Recovery School District (RSD) schools in every test grade (3-8) and subject, as measured by LEAP and iLEAP tests" (KNOS 2012-13 Snapshot).

Statement of the Problem

There is no one single method of teaching that has been proven to effectively teach every child at every level within a classroom. If classroom instruction is not engaging learners, then it is clear that they are not learning (Pierce, 2009). We currently face a time when the convergence of the global economy and information and technology has shaped an environment in which the medium for instruction could undergo transformation (Wagner, 2008). The Internet conveyed a scalable method to design the learning environment that gives students the ability to take more responsibility and ownership of their learning (Picciano & Dziuban, 2007).

There is no evidence to suggest that any one method of delivering instruction works to educate every child in any given subject. While some students may benefit from visual aids, others need to be hands on, and for some simply hearing or reading allows them to comprehend a given lesson. Having the ability of utilizing different methods of instructions across a classroom, allows students to learn at their own pace with individualized help that has proven to be a significant force in the success of students when academic success and improvement were measured.

Statement of the Objective

Blended learning can be implemented in a multitude of ways. The general idea is to dedicate a portion of the day as teacher led instruction, and at other times students enhance skills and learn at their own pace via online or computer based software also known as Course Management Software (CMS). Studies have shown that blended learning saves educational organizations money when facilities, personnel, and textbook costs are examined- frequently with enhanced academic outcomes. It's clear to traditional brick-and-mortar schools that allowing students to use online learning has unlocked performance gains by leaps and bounds. Students across America are relative experts in the technological in daily life; many students across the country are accomplished authors, animators, game creators, and filmmakers (Knobel, 2009). The objective of the study is to examine the thought process, relevant factors, and benefits of implementing blended learning models within the network of KIPP New Orleans Schools. Specifically the study is to investigate implementation reasons and processes across ten (10)

specific school operators across America that share demographics with KIPP New Orleans Schools. Factors within blended learning instruction cited in the review of literature following this chapter included blending of face-to-face and computer-based or online instruction for the purpose of satisfying a portion of content delivered via web, using multiple strategies for learning or to enhance the classroom experience by promoting the use of new information and communication technology (NACOL, 2008).

BACKGROUND

The idea of a global economy has been written and discussed extensively since the emergence of the new millennium. In today's global economy, each country has access to emerging technological tools to access and broaden knowledge. According to Marx, knowledge is the new commodity in the global economy (Marx, 2006). Sixteen Trends, written by Marx in 2006 demonstrates that the future of any economy is its ability to grow intellectual and social capital. From the educational standpoint, this is letting society know that students must be involved in activities that necessitate creative and critical thinking strategies, use and apply technological skills, and develop and maintain not only tolerance, but acceptance of those who differ from themselves (Marx, 2006; Ahmed, 2010).

Authors such as Friedman (2005) and Marx (2006) agreed that now and for years to come, students are competitively matched for jobs with greater numbers of across America will need to rethink what type of education is required to help students get and keep jobs in the future, review where they are now, and restructure so that this is possible (Achieve, 2005; Wagner, 2008). According to Franciosi, instruction in the United States has remained reasonably static over the last century. Technology has become common place in most schools and homes, yet methods of instruction have not drastically changed to expand on the skills students are developing outside of the classroom (Franciosi, 2012).

Personalizing learning through methods such as advisories, individualized education plans (IEPs), mentoring, and differentiated instruction engage students in their studies because students know that their teachers are striving for their success and learning (Educational Research Service, 2008). To engage learners in the classroom setting, it is necessary to understand these new learners, and the needs of the learners today have significantly changed from those just ten years ago (Thornburg, 2002).

In order for students to acquire a real-world arduous and relevant education, we need to make sure they are exploring the concepts surrounding the up-and-coming technologies (Oblinger, 2005, Ed Week Staff, 2008). Implementing blended learning models has brought about the opportunity to increase one-on-one instructional time for students requiring additional help, allow students to recover unattained course credits, and aid in providing evaluating students for possible advanced placement (NASSP, 2007).

Transition and Leadership

Transition is defined as the movement, passage, or change from one position, state, stage, subject, or concept to another. Transitions take time, and for successful transformative change to take place, leaders must allow for a suitable amount of time for people to believe in the proposed change (Fullan 2007).

The outlined criteria are helpful in showing what's required, however, there is no evidence that there is a single way to bring about successful transition. Several organizational barriers must be broken in order for leaders to be sure that an innovation is fruitful (Bass 1994). Implementing blended learning instruction is considered second order change due to the fact that doing so warrants profound change in the area of pedagogy, approach to teaching, learning, and curriculum.

Learning Environment

The fairly new emergence of blended learning models fundamentally, uses web-enhanced competencies to make the traditional classroom a hybrid model and online and computer based learning environment (Vaughn, 2007). Upon considering that instruction and the instructional environment establish a critical base of elements to form understanding in learners, it is vital that we review the way in which blended learning models in the educational K-12 environment impact students' experience in the learning atmosphere. Studies show that students in blended learning are generally more active and interactive learners than students who partake solely in traditional face-to-face instruction.

A study by Vaughn, which examined the strengths and challenges of blended learning classrooms, found that students enjoyed the improved time flexibility, learning outcomes, and personal attention. Table 1 summarizes findings at ten (10) school operators observed through this research.

Table 1: Blended Learning Benefits & Challenges		
FACTORS	BENEFITS	CHALLENGES
STUDENTS		
Time Flexibility	X	
Time Management	X	
Course work-load	X	
Ability to prioritize assignments		
Responsibility for learning		X
TEACHERS		
Increased engagement in learning process	X	
Course flexibility	X	
Environment forces improvement	X	
Time commitment	X	
Professional development support		X
Mastering new teaching and technology skills	X	

Source: (Vaughn 2007)

Shea (2007) informs us that the primary focus should be on "grounded instructional methods" in advance of determining which technological tools should be utilized in classrooms of blended environments. In an effort to elaborate on this idea, Bransford, Brown, and Cocking (2000, 2002) delivered a conceptual model to build upon the understanding of research that has shown examples of learning and teaching and learning in the technology-mediated classroom (Shea, 2007). He created a theoretical framework known as "How People Learn (HPL framework-Table 2), outlining types of effective learning centered environments.

Table 2: How People Learn Theoretical Framework	
Effective Learning Attributes	**Characteristics**
Learner-Centered	Activities focus on goals and interests of the student. Understand who students are.
Knowledge-Centered	Enhance student understanding rather than memorization. Active learning focuses on depth rather than breadth.
Assessment-Centered	Helps learners make thinking visible. Curriculum and assessment are aligned. Formative feedback and substantive interaction.
Community-Centered	Promote connectedness, collaboration, and construction of knowledge.

Source: (Bransford et al, 2000, 2002)

Teacher Outlook on Blended vs. Traditional Instruction

While some might argue that there are ways to make traditional instruction more dynamic and learner-centered, here we examine the versatility of blended course models where the internet, Course Management Software, and face-to-face instruction vs. only face-to-face instruction. Blended learning models can provide a full suite of subjects, or simply fill in the gaps in a school's traditional curriculum. The blended models researched in this study have incorporated Course Management Software in the Mathematics and Reading portions of their curricula. Blended models often address the needs of the most advanced students while simultaneously meeting the needs of students who have the most academic difficulties- allowing teachers to pay closer attention to the needs of the students struggling to comprehend lessons. Lastly, they can be used as a supplementary tool in traditional face-to-face courses, allowing students to pursue their studies independently of their peers (Watson and Butch, 2008).
Studies show that short-comings of the computer-based component of blended learning include:

1. The lack of in-person interaction with an instructor can make the delivery of content uninteresting.
2. The up-front time commitment and training costs of developing a blended learning program can be high.
3. There is minimal in-person interaction with other class members.
4. There is no universal standardization, so purchasers cannot easily "mix and match" offerings from different Course Management Software providers.
5. Students become active learners, gaining the ability to effectively communicate needs and interests teachers in efforts to achieve academic success.

Student Engagement

The facts that contribute to high levels of student engagement are a concoction of the background of individual students, guidance, expectations and outlooks of parents and peers, and the school-wide instructional methods (Jones, 2008), and teachers must become accustomed to two elements on which student engagement can be achieved: preconditions and pedagogy. A meta-analysis shows that students in online conditions performed better, on average, than students learning the same material through traditional face-to-face teaching. The effect is greater when students work collectively or are led by an instructor than when they work independently. The finding most relevant to the subject of this report, however, was that blended learning showed a larger advantage compared to both traditional, face-to-face learning and purely computer-based or online learning. Students in blended programs may spend more time on their studies than other students (Reil and Sparks, 2006).

Learning Theory

Learning theory proposes that student learning or engagement is heightened when students are vigorously involved in their learning (Newmann, 1996). Engagement Theory is a subset of learning theory that describes the existing and potential use of technology for teaching and learning (Kearsley & Shneiderman, 1998). This theory accentuates meaningful learning, teamwork and partnership, and constructivist methodologies which state that that learning occurs as learners are actively involved in a process of meaning and knowledge construction as opposed to passively receiving information (Ed Online, 2004). In these settings, engaged learners are involved in a dynamic cognitive process by means of problem-solving, reasoning, creating, decision-making, and assessment (Kearsley & Shneiderman, 1998). Furthermore, Munro and Rice-Munro (2004) stated that there must be equilibrium between instructional design, content knowledge, and technology in the learning environment.

An additional study questioned whether or not the integration of instructional technology was to be used as a tool for teaching and learning or a device to deliver daily classroom instruction. This study concluded by first stating that instructional technologies are influential tools (Palak, 2006), and within the function of those tools rests the teachers' beliefs, opinions, individual instructional style, and attitude regarding how technology can be integrated into the core curriculum . Scholar engagement, learning, and achievement continue to stand as the result of the interaction of multifaceted, multidimensional, and interconnected features. The literature and research compiled in this study show that several factors in a traditional face-to-face classroom setting that affect scholars' learning experiences will be significant factors for the blended learning instructional model (Bonk, 2006; Graham 2007).

Reaching Minority and High-Need Students

KIPP New Orleans Schools, along with the ten schools researched in this study all serve minority, high-need students. The demographic make-up of each school meets the minimum of the components below:

1. 90% or more African American students
2. 90% or more of students qualify for free or reduced-price lunch
3. 10% or more receive special education services

Many proponents of blended learning using Course Management Software praise its potential to increase access to high quality information and resources, especially for historically underserved students. Minority and high-need students fall into this category. High-need students are those with learning disabilities, emotional distress, or behavioral issues that are at highest risk of dropping out of school for any number of academic or nonacademic reasons. These students often have certain characteristics in common, and a number of indicators help identify them early, specifically: having incarcerated parents; pregnancy; being two or more grade levels behind; having parents with a history of drug or alcohol abuse; having low socio-economic status; and having an older sibling who dropped out of school (Watson, John, and Butch 2008).

It is important to note that while the categories of minority and high-need students may overlap and are often grouped together, not all minority students are at risk of dropping out, and not all high-need students have minority status. However, in America, dropout rates of minority students do tend to be much higher than average rates across all races. According to a recent report, nearly one third of all public high school students – and nearly one half of all African Americans, Hispanics and Native Americans – fail to graduate from public high school with their class (Watson, John, and Butch 2008). High rates of students dropping out of school have a direct and immediate impact not only on their lives, but on our economy as a whole. Reports show that individuals who drop out from school are positioned to make, on average, $9,200 less per year than their diploma-holding counterparts; on an individual level, their opportunity for attaining successful careers are brutally weakened.

METHODOLOGY

Blending learning method has arisen from the merging of technology and pedagogy. In this learning environment, technology is used to incorporate asynchronous learning channels, which often provide scholars with more relevance in their understanding and learning of content in a given course. In this study focuses on examining seven relevant issues of transitioning KIPP New Orleans Schools from traditional models to blended learning. These issues include:

- Issue-1: will discuss demographic information of KNOS teachers and school leaders will be evaluated as a means to show cultural/ethnic differences between scholars served and those delivering instruction.

- Issue-2: will show respondents' background and level of experience with blended learning.

- Issue-3: will discuss respondents' perception on what is important when implementing blended learning models.

- Issue-3: will examine respondents' perception on whether or not blended learning models would be beneficial instructional methods for the minority, at-risk scholars served by KIPP New Orleans Schools.

- Issue-4: will explore data retrieved regarding the types of technology used in blended learning models that could be potentially used in KNOS.

- Issue-5: will discuss respondents' expectations of the propensity of blended learning models to increase scholar success in KIPP New Orleans Schools.
- Issue-6: will show respondents likelihood of teaching via blended learning models.

Method of Approach

The findings of this study were gathered using a multiple case (primarily and secondary data) study approach with multiple data points to examine the implementation of blended learning model. The following table indicates the schools that have been selected for the primarily and secondary date sources.

Table 3: Primarily and Secondary Data Sources			
Primary Date Source: New Orleans KIPP Schools		**Secondary Date Source**: Outstate Schools	
1	Renaissance High	1	San Jose, CA
2	McDonogh 15 Middle	2	Los Angeles, CA
3	McDonogh 15 Primary	3	Los Angeles, CA
4	Central City Academy	4	Montgomery, AL
5	Central City Primary	5	Chicago, IL
6	Believe College Prep	6	Chicago, IL
7	Believe Primary	7	Chicago, IL
8	New Orleans Leadership Academy	8	Memphis, TN
9	New Orleans Leadership Primary		

Sample Selection and Data Resources

The samples in this study were selected because the selected schools have a similar make-up to the schools in the KIPP New Orleans Schools network, and have recently (within the last two years) implement blended learning models into their traditional school days. The teachers and school leaders who participated in this study within KIPP New Orleans Schools are not currently utilizing blended learning instruction in their classrooms. However, the ten schools studied have recently transitioned from traditional instructional methods to blended learning instructional models.

The primarily data was collected from nine (9) schools in New Orleans area. A total of 186 surveys were distributed to teachers and school leaders across the KNOS network. Of the 186 distributed, 130 surveys (70%) were completed at 100%, and considered usable data to be considered in the study. The following table shows the tabulation of surveys completed by teachers at each school.

The use of multiple sources of evidence strengthens arguments by an effect known as data triangulation. Utilizing multiple data points produces a situation where the case study conclusions are more convincing and clear-cut (Yin, 2009). This study used multiple sources of data including a survey completed by teachers to gauge their interest in implementing blended learning models in their classes.

Table 4: Survey Completion by School	
KIPP Schools	Respondents
1- Renaissance High	15
2- McDonogh 15 Middle	21
3- McDonogh 15 Primary	17
4- Central City Academy	10
5- Central City Primary	15
6- Believe College Prep	7
7- Believe Primary	13
8- New Orleans Leadership Academy	23
9- New Orleans Leadership Primary	9
Total	**130**

Three observations of the blended learning program (Math, English, and Reading) at schools 1 and 6 were conducted over the course of the study. Finally, use of secondary research on schools that have recently implemented blended learning models was used to determine the benefits of doing so within KIPP New Orleans Schools. Information and documents that were relevant to the case were collected, tabulated, and reviewed by the researcher. Tabulated information came from secondary research by way of case studies on the ten schools observed in the study as well as observation of the blended learning programs at two schools used in the study located in New Orleans, LA, and the survey by teachers and school leaders of KIPP New Orleans Schools. The participating teachers and school leaders were asked to identify their level of knowledge on and experience with blended learning programs. They were also asked to anticipate successes and challenges with implementing blended learning models into their daily routine.

This multiple case study examined the implementation of blended learning in ten schools across America serving students in grades kindergarten (K) - twelve (12). The ten schools were chosen because they similar demographics with KIPP New Orleans Schools and have implemented blended learning models into their traditional educational settings. Each school incorporated blended instruction into their Reading and Mathematics instruction for a portion of the regular school day for students in each grade. Of the ten school operators studied, seven are operated by individual Charter Management Organizations (CMOs), as is KIPP New Orleans Schools. The researcher generated questions that captured information about the teachers who would possibly incorporate blended learning into their daily routine and their opinions on implementation.

FINDINGS

This study examined ten school operators that have implemented blended learning instructional models into K-12 school settings. The data for this research were gathered through various data points. These included direct observation of a blended learning courses and model

of one school within the study, teacher and school leader surveys, and review of secondary research thru case studies done by other researchers. The teacher surveys were completed by current KIPP New Orleans Schools teachers and school leaders who are not currently using blended learning technology in their classrooms. The guiding questions of the study directed the collection and interpretation of the data, and were assembled based on similar questions answered by ten schools that have transitioned from traditional instructional models to blended learning models. Data were collected over one academic semester during the spring, 2013.

Issue-1: In this issue, demographic information of KNOS teachers and school leaders will be evaluated as a means to show cultural/ethnic differences between scholars served and those delivering instruction. Through this research we may find a link between demographics and level of comfort transitioning to blended learning models. Discussions with parents often reveal feelings that teachers who "are not from" where students are from have trouble relating to and reaching them in the classroom. Breaking this "barrier" by allowing multiple instructional methods has the potential to increase student achievement by broadening the range of discussion topics between KNOS teachers and scholars. Of the teachers surveyed, 54% were Caucasian, 35% African American, and the remaining 11% were of Asian or Hispanic descent. The data reveals that of the population sampled, 45% were male and 55% were female, with an average age of 26-36.

Issue-2: Issue-2 asks what respondents' background and level of experience with blended learning is. Teachers and school leaders are key players in the transition of instructional methods within the school environment. Studies have shown that socioeconomic and race factors play a major role in individuals' use of technology. The Digital Divide shows gaps between African Americans and Caucasians under age 60 are more pronounced in the home than at work. This aids in determining teacher comfort level in regard to use of technology. The following table indicates that Caucasian group has higher level of comfort using technology in their classrooms.

Table 5: Respondent Comfort Level using Technology—By Race						
	Very Uncomfortable	**Uncomfortable**	**Moderated Comfortable**	**Comfortable**	**Very Comfortable**	**Total**
African American	0	1	11	17	17	46
Asian	0	0	0	1	2	3
Caucasian	0	0	3	20	47	70
Other	0	0	0	5	6	11
Total	**0**	**1**	**14**	**43**	**72**	**130**

Studies suggest that the divide is more pronounced at lower-income levels than at higher-income levels. Giving teachers the opportunity to become comfortable with computers in the academic setting is a major step in closing the digital divide not only for them, but for students who have under-utilized technology for years.

Issue-2 also looked at the experience of teachers with blended learning instructional method. The result of survey indicates that 72% of them are familiar with blended learning method, 55% even took the course, but only 29% implemented/taught blended course.

Table 6: Respondent Background and Experience with Blended Learning			
KNOS School	**# Familiar with Blended Learning**	**# Taken Blended Learning Course**	**# Taught Blended Learning Course**
1- Renaissance	15	9	4
2- McDonogh 15 Middle	19	16	13
3- McDonogh 15 Primary	8	5	3
4- Central City Academy	13	8	5
5- Central City Primary	5	5	0
6- Believe Primary	9	7	0
7- Believe College Prep	7	7	3
8- Leadership Primary	4	4	0
9- Leadership Academy	14	11	10
Total	94	72	38
Overall Percentile	72%	55%	29%

Issue-3: This issue discusses respondents' perception on what is important when implementing blended learning models. While forty-eight percent of teachers and school leaders surveyed agreed that blended learning was of better quality in terms of achieving academic success, opinions on what factors were most important in the implementation process varied. Almost half the individuals surveyed (48%) found "initial setup/training" to be the most important factor in implantation, while "facilities" (17%) and "technology" (14%) staggered at close second and third. This reveals that teacher perception is that having the right technological tools and an environment conducive to productive teaching and learning are super-ceded by being thoroughly trained on the new instructional method.
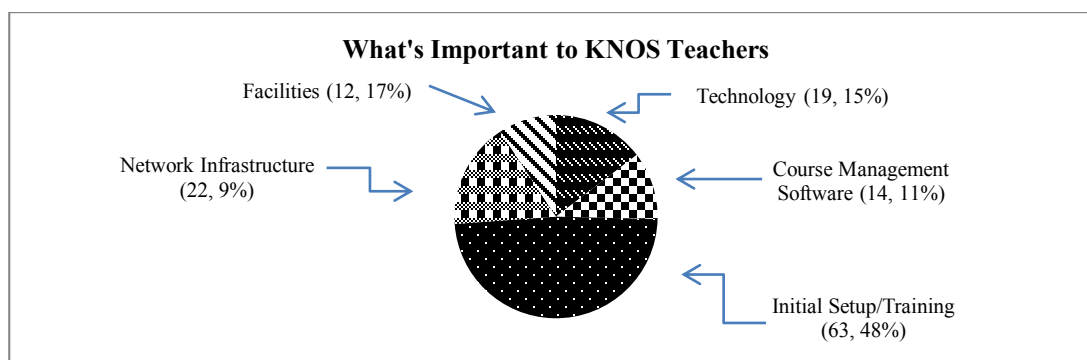
What's Important to KNOS Teachers

Facilities (12, 17%)
Technology (19, 15%)
Network Infrastructure (22, 9%)
Course Management Software (14, 11%)
Initial Setup/Training (63, 48%)

Figure 3: What's Important to KNOS Teachers/School Leaders

Issue-4: Issue IV asks the question, "Are blended learning models beneficial instructional methods for the minority, at-risk scholars served by KIPP New Orleans Schools?" Secondary research discussed demographic make-up of ten schools that have recently implemented blended

learning models, in comparison to the demographic make-up of KIPP New Orleans Schools. Table 6 below shows that the demographic make-up of each school studied is similar in terms of percentage of minority student attendance and students receiving free or reduced price lunch. Schools included range from Pre-K – 12th grades, with the largest variation shown in percentage of special needs students served; five of ten operators are within a five percentage point range of KIPP New Orleans Schools, three are several percentage points higher, and two are unknown.

Table 8: Demographics of Relevant Schools					
School Demographics	**Grades Served**	**Total Enrollment**	**% Minority**	**% Free/Reduced Lunch**	**% Special Education Needs**
KIPP New Orleans Schools (9 total schools)	K-11	3200	97	94	12
School 1- New Orleans, LA	K-8	422	98	98	26
School 2- San Jose, CA	K-5	507	91	90	4
School 3- Los Angeles, CA	K-2	330	99	91	10
School 4- Los Angeles, CA	9-11	247	90	90	11
School 5- Montgomery, AL (396 schools)	PreK-12	18, 640	92	90	14
School 6- New Orleans, LA	9-12	284	98	92	17
School 7- Chicago, IL	5	90	99	90	8
School 8- Chicago, IL	6-12	200	99	95	Unknown
School 9- Chicago, IL	9-12	550	100	97	19
School 10- Memphis, TN	K-5	384	92	87	Unknown

Issue-5: Issue V explores data retrieved regarding the types of technology used in blended learning models that could be potentially used in KNOS, and discusses the performance benefits of using technology via blended learning in the classroom.
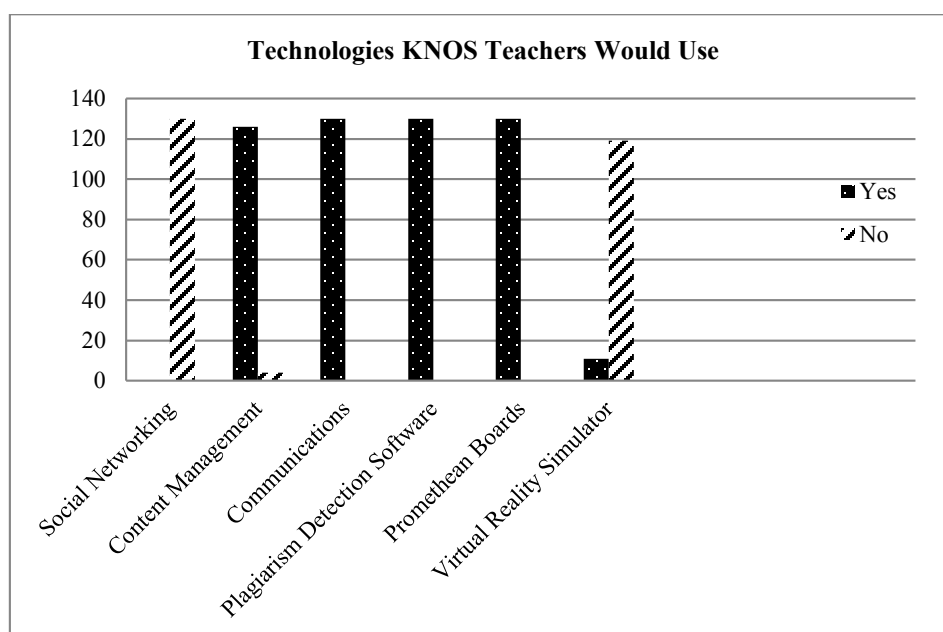
Figure 4: KNOS Teacher and School Leader Use of Technology in the Classroom

Issue-6: This issue discusses respondents' expectations of the propensity of blended learning models to increase scholar success in KIPP New Orleans Schools. Specifically, the question, "Will blended learning increase scholar success?" was asked. Teacher and school leader expectation for beneficial results stemming from use of technology in the classroom was explored in the research. Teachers and school leaders who had prior experience with blended learning had higher expectations for seeing benefits through implementation of blended learning models.
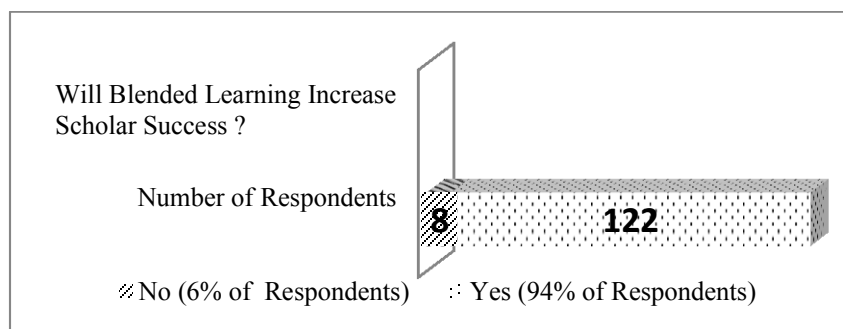

Figure 5: Propensity for Success with Blended Learning

Issue-7: In this issue respondents likelihood of teaching via blended learning models was discussed. Each respondent was open to the idea of providing instruction in blended learning format.
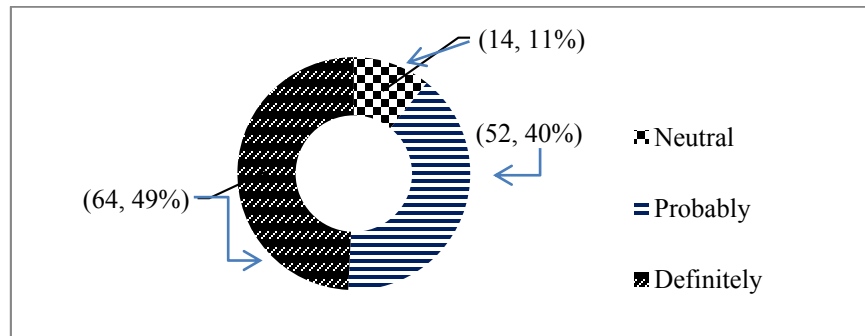
Figure 6: Respondent Likelihood of Teaching via Blended Learning Format

Collective Results and Recommendations

Based on the information and secondary research analyzed, there are many benefits of blended learning instruction. Major factors to be assessed when making the decision on whether or not to transition to the blended learning instruction include technology to be used, personalization of the learning experience, and the implementation process. It is the responsibility of school leaders and members of management to ensure that the proper steps are taken in order to successfully make the transition from traditional instruction to blended learning models.

CONCLUSION

Innovation often occurs in stages. An idea, product, or service may start off with a very small change, and before you know it, it's improved to levels beyond what anyone would have imagined. Over the past few years, consumers have seen these types of changes on both large and small scales- from the way we watch television and movies to how we communicate with those far away from us. If an institution as long-standing as the US Postal service can undergo transformative change, the idea of the educational system doing the same is not far-fetched.

Blended learning is often described as the process of combining computer-based or online learning with traditional face-to-face and other methods of instructional delivery. This concept is considered by many one of the most promising instructional practices in educational settings. Schools across the country have implemented a variety of blended learning models, and are seeing success on several levels. This study was conducted at the K-12 educational level, looking at ten school operators in the United States that have transitioned from traditional instructional methods to blended learning models. It explores and considers the perspective of school leaders, teachers, and students as the idea of implementing a blended learning model is discussed by organizational leadership. Having seen major academic improvements in schools that are using blended learning models, the opportunity for KIPP New Orleans Schools, leader in education reform in New Orleans, to possibly increase scholar success across the network has been identified. This study collected qualitative data from multiple sources, including observations, surveys, discussion with a New Orleans area charter organization utilizing the blended learning model, and outside research studies. The information collected helped determine how blended

learning models aid students in achieving academic success on higher levels than previously seen.

The results of this study indicate that transitioning from the traditional learning environment to a blended learning model would be beneficial to students- allowing them to learn at their own pace, teachers- allowing them to give additional attention to students where needed- on a more direct and pinpointed level, and KIPP New Orleans Schools as a whole from a financial perspective. The result of data analysis shows that 94% of 130 respondents agree that blended learning has the propensity to increase scholar success across the network of KIPP New Orleans Schools, and that 29% of respondents have previously taught via blended learning format. As in any successful endeavor, results showed that having a precise vision, mission, and purpose are crucial in implementing a blended model that produces improvement.

DIRECTIONS FOR FUTURE RESEARCH

The concept of blended learning is fairly new to the K-12 educational environment. This instructional phenomenon is sweeping the nation, and introducing new exceptional ways of educating students across the country. Future research should observe trends in implementing blended learning programs, as well as changes in classroom structure and academic growth and progress. It is important to recognize both the strengths and weaknesses of the transition to blended learning models; this will be a factor other schools use in determining whether or not the transition is the best move for their students. Another important issue that should be examined further is the ways in which blended learning effect the financial status of school operators. Further research should examine the potential for grant and state or federal funding opportunities. Finally, distinguishing the differences between different blended learning models and student demographics to determine which model could work best based on historical data could assist in the planning process for transitioning to blended learning programs.

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