

*Journal of Teaching Effectiveness and Student
Achievement*

Volume 1, Issue 1

Winter 2014

Amy M. Williamson, Ed.D.

Blake Hightower, Ed.D.

Editors

2013-2014 Editorial Review Board

Ms. Saler Axel
Doctoral Candidate, Southern Methodist University

Dr. Marcia Bolton
Associate Professor, Widener University

Ms. Anitra Butler
Lecturer, Towson University

Dr. Suzanne Colvin
Associate Director, School of Teaching and Learning, University of Florida

Dr. Rocio Delgado
Associate Professor, Trinity University

Dr. Carl Dethloff
*Assistant Superintendent of Human Resources and Professional Development
San Angelo ISD*

Dr. Vicky Dill
*Senior Program Manager, Texas Homeless Education Office
University of Texas at Austin*

Dr. George Fero
Professor, McKendree University

Dr. Joyce Finch
Assistant Professor, Texas Southern University

Dr. Leanne Howell
Visiting Clinical Assistant Professor, Baylor University

Dr. Dionne Jackson
Assistant Professor, Hendrix College

Dr. Latasha Jones
Clinical Assistant Professor, Georgia State University

Dr. Kriss Kemp-Graham
Assistant Professor, Texas A&M University- Commerce

Ms. Carol Marlar
Director of Instructional Services, Wichita Falls ISD

Dr. Ramona Pittman
Assistant Professor, Texas A&M University-San Antonio

Mr. Dan Quinn
Executive Director, Great Lakes Center for Education Research and Practice

Dr. Devery Rodgers
Assistant Professor, Mount St. Mary's College

Dr. Marva Solomon
Assistant Professor, Angelo State University

Dr. Tracy Taylor
Director of Assessment, Research, and Program Review, Ector County ISD

Dr. James Taliaferro
Superintendent, Texas Tech University ISD

Dr. Mary Webb
Remote Associate Professor, Texas A&M University-Commerce

Dr. Alaric Williams
Assistant Professor, Angelo State University

Table of Contents

Supervised Field Experiences for Pre-Service Teachers: Is it Worth the Effort?

Dr. Tammy Abernathy, Dr. Ginny Beck, and Dr. Shanon Taylor.....5

Math Remediation?- Success is Possible!

Dr. Deborah Banker and Dr. Stella Filizola.....17

Improving Pre-Service Teacher Dispositions

Dr. Marcia Bolton and Dr. Dana Reisboard.....24

An Investigation into the Expansive-Restrictive Nature of Teachers' Learning Situated in the Workplace

Dr. Eric J. Feeney.....33

Using Metacognitive Awareness of Fluency to Enhance Vocabulary

Dr. Teri Fowler and Dr. William Laird.....44

Culturally Responsive Teaching: Increasing Involvement of Minority Students and Parents

Ms. Angela Piña.....52

Teacher Candidates' Perceptions of Special Education

Dr. S. Nina Saha-Gupta, Dr. Margarita Lara, and Mr. Jeffrey House.....60

The Teacher Preparation Initiative

Dr. Yolanda Salgado, Dr. Janet A. Carter, Dr. Jeannine Hurst, and Dr. Ann Marie Smith.....75

Supervised Field Experiences for Pre-service Teachers: Is it Worth the Effort?

Dr. Tammy Abernathy, Dr. Ginny Beck, and Dr. Shanon Taylor

Research on teacher preparation programs suggests that field based and practicum experiences are important components of what pre-service teachers need to be well prepared (AACTE, 2010; Brownell, Ross, Colon, & McCallum, 2005; Denton, 1982; Fayne, 2007). While the literature is consistent on the importance of field experiences, the details and characteristics of strong field based experiences have not been well defined. Research indicates that supervision of pre-service teachers in field experiences is an important part of their professional development (Fayne, 2007).

Brownell, Ross, Colon & McCallum (2005) identified seven common features of effective teacher education programs with the need for quality field experience prior to student teaching as a dominate theme. It was suggested that quality field experiences have the following components. First, field experiences should have a strong connection and integration with coursework (Hardman, 2007). Further, pre-service teachers should participate in field experiences that include working with students from diverse backgrounds and a variety of schools and grade levels (Wilson, Folden, & Ferrini-Mundy, 2002). Finally, pre-service teachers need supervision and consistent feedback from professionals to improve their practice (Fayne, 2007).

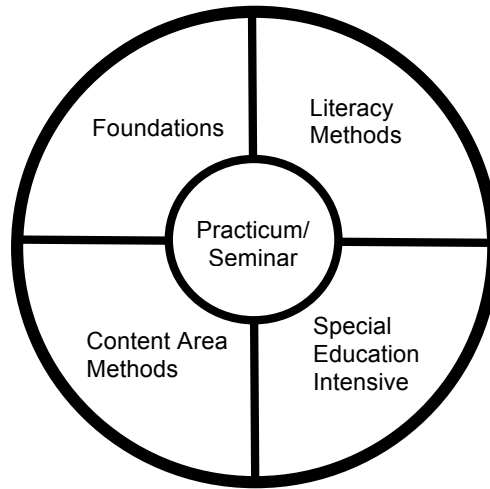
While the literature consistently emphasizes the importance of field experience (AACTE, 2010), the details and characteristics of field experience have not been well defined. Specifically, research has not determined the optimal amount of field experience to prepare high quality beginning teachers. Policy briefs and national organizations make recommendations, but do not back up their suggestions with data (AACTE 2010, NCTQ, 2010). Second, there is little research to suggest how field experiences should be structured. This is an important question, given the impact pre-service teachers can have on classrooms and teachers who are working to improve student outcomes. Finally, although formal supervision is suggested, it is unclear how much supervision is required and who should supervise.

Context of the Project

The Integrated Teacher Education Program (ITEP) was created as a four-year degree program for undergraduates to earn an Elementary and Special Education Teaching License. ITEP is NCATE accredited and provides pre-service teachers with general education and special education content as part of a single program model. The redesigned program was premised on a “merged model” of teacher education, which is defined as: “general and special education program content offered in one single curriculum that is completely integrated, including all courses and field experiences” (Blanton & Pugach, 2007, p 23). For a complete view of this program, see Figures 1 and 2.

ITEP is structured into four blocks considered communities of practice (p 16) as described by Ross and Blanton (2004) (See Figure 2). Pre-major classes and Block I were designed to prepare pre-service teachers for the rigors of teaching the common core standards and for initiating them into the expectations, standards, and dispositions of the profession.

Figure 1. Conceptual Model for ITEP Blocks.



Supervised intensive field experiences begin in Block II. Abernathy and Taylor (2013) provide a full description of the program, theoretical influences and evaluation data of ITEP.

Figure 2

Structure of the ITEP Blocks.

Fall Semester	Spring Semester
English Math Fine Arts Intro to Special Education Social Science 15 total credits	English Math or Science Students w/ Diverse Ability & Backgrounds Educational Technology Core Humanities A 15 total credits
Core Humanities Math or Science Book Selection For Children Family Involvement Core Humanities B 15 total credits	Block 1 “Exploring” Intro to Teaching in Inclusive Classroom Exploring Teaching & Learning: Practicum/Seminar (1cr) Educational Psychology Law and Ethics in Education Core Humanities C Math or Science 16 total credits
Block 2 “Developing” Literacy in Elem/Special Ed: K-3 Integrated Science, Math, Tech Assessment for Special Educ Teacher “Developing” Practicum/Seminar Capstone	Block 3 “Engaging” Literacy in Elem/Special Ed: 4-8 Math Instruction Elem/Special Ed Social Studies for Elem/Special Ed Special Education Curric: Elem “Engaging” Practicum/Seminar

15 total credits	15 total credits
Block 4 “Refining” Literacy Instruction: Indiv Small Group Transition and Case Management Science Instruction for Elem/Special Ed Behavior Management “Refining” Practicum/Seminar	Block 5 “Applying” Internship in Elementary/Special Ed (student teaching)
15 total credits	16 total credits

Development of Field Experiences

The following guiding principles were followed in the design of practicum courses.

- Students become teachers through a process that becomes more intense over time (Hammerness, Darling-Hammond, Grossman, Rust, & Shulman, 2005).
- Students need to work in a variety of classrooms at a variety of grade levels (Wilson, Folden, & Ferrini-Mundy, 2002).
- Students should learn from many highly qualified teachers (Billingsley, Carlson & Klein, 2004).
- Students should teach and over the course of an entire program learn all aspects of the teaching profession (Billingsley, Carlson & Klein, 2004).
- Structured observation and feedback are essential to student success (Fayne, 2007).

Pre-service teachers completed a three-credit practicum for Blocks II, III, and IV. Assignments were determined by faculty teaching the courses in the block. This assured the link between what was learned in courses and what was expected in field experience. Further, pre-service teachers experienced the demands of full day instruction and were required to teach multiple lessons in a variety of content areas. This approach was different than field experiences that target content areas in isolation. Pre-service teachers were placed in schools for one full day per week or two mornings per week.

Research Problem

While there is clear support for clinical experiences for pre-service teachers, there remains no clear-cut guidelines on the length, structure, or type of field experiences pre-service teachers need to be highly effective teachers. The purpose of this study was to examine the effect of consistent observation with feedback by trained supervisors on the teaching performance of pre-service teachers in their field experiences prior to student teaching. The following research questions were examined for this study: (1) Given consistent observation and feedback, do pre-service teachers improve their teaching practices over the three semesters of their field experience? (2) Is there a difference in the observed teaching performance for high, mid-level, and lower achieving pre-service teachers?

Method

This observational study was conducted over three semesters and included 31 undergraduate pre-service teachers pursuing a dual teaching license in elementary and special education. These pre-service teachers were observed teaching in Block II, III, and IV field experiences (one 3-credit field experience per semester) prior to student teaching. Upon admission, every pre-service teacher had passed PRAXIS I and had a minimum GPA of 2.75 in their university core and content classes. The average GPA of the participants was 3.25. Each participant had completed their pre-major classes, was admitted to ITEP, and followed the block schedule plan. Pre-service teachers completed three semesters of field experience in three types of elementary schools (persistently high, middle and low achieving schools).

Observations and Instruments

During each semester, three types of evaluations were conducted. Every pre-service teacher participated in formal observations, informal observations and a final holistic evaluation from the classroom teacher. All observations and evaluations were followed by a debriefing conference. University supervisors scheduled the day and time *formal observations* would take place. This allowed pre-service teachers to submit their lesson plans prior to the observation. Each formal observation was conducted for a full instructional lesson. The number of observations conducted each semester was a component of the block. As pre-service teachers progressed through the program and developed skills and confidence, one additional formal observation was added. Specifically, during Block II, pre-service teachers were formally observed once, in Block III, two formal observations were conducted, and in Block IV, three formal observations were conducted. The formal observation instrument consisted of 14 identified teacher behaviors/skills to be evaluated on a 0-6 point scale, with 6 representing distinguished performance for a beginning teacher. Observed behaviors are listed as part of Table 1.

Results

Data from observations of 31 pre-service teachers from three practica placements across three semesters (blocks) were coded and analyzed. The overall results revealed that pre-service teachers improved their performance over time (See Table 1.).

Table 1

Mean and Standard Deviation of Formal Observations by Blocks and Items (n=31).

<u>Observed Teaching Behavior/Skill</u>	<u>Block and Observation</u>					
	II Obs 1 <u>M</u> (SD)	III Obs 1 <u>M</u> (SD)	III Obs 2 <u>M</u> (SD)	IV Obs 1 <u>M</u> (SD)	IV Obs 2 <u>M</u> (SD)	IV Obs 3 <u>M</u> (SD)
1. Goals/objectives	5.14 (1.09)	4.7 (1.91)	5.3 (1.56)	5.33 (1.12)	5.77 (0.9)	5.87 (0.43)
2. State standards	5.13 (1.33)	5.53 (1.22)	5.93 (0.37)	5.17 (1.64)	5.83 (0.6)	5.7 (1.12)
3. Teacher preparation/content	5.41 (0.76)	5.57 (0.82)	5.87 (0.35)	5.33 (1.03)	5.63 (0.85)	5.63 (0.72)

Observed Teaching Behavior/Skill	Block and Observation					
	II Obs 1 <u>M</u> (SD)	III Obs 1 <u>M</u> (SD)	III Obs 2 <u>M</u> (SD)	IV Obs 1 <u>M</u> (SD)	IV Obs 2 <u>M</u> (SD)	IV Obs 3 <u>M</u> (SD)
4. Attention	4.96 (0.87)	4.87 (1.04)	5.53 (0.51)	5.23 (1.07)	5.3 (1.12)	5.6 (0.72)
5. Lesson tied to previous learning	4.93 (1.48)	4.33 (2.01)	4.8 (2.04)	4.57 (2.22)	5.47 (1.28)	5.6 (0.89)
6. Student involvement	5.19 (0.75)	5.53 (0.73)	5.73 (0.58)	5.5 (0.86)	5.6 (0.86)	5.83 (0.38)
7. Student understanding	5.06 (0.89)	4.93 (0.83)	5.43 (0.77)	4.8 (1.37)	5.37 (1.03)	5.53 (0.94)
8. Management	4.98 (0.84)	4.77 (1.04)	5.43 (0.63)	5.03 (1.25)	5.20 (1.13)	5.60 (0.77)
9. Opportunities for practice	5.00 (0.77)	5.07 (0.87)	5.60 (0.62)	5.27 (1.05)	5.57 (0.73)	5.80 (0.46)
10. Assessment	5.00 (0.93)	4.93 (0.94)	5.60 (0.56)	4.77 (1.43)	5.30 (1.12)	5.37 (0.81)
11. Transition	4.75 (1.54)	4.2 (2.11)	5.07 (1.80)	4.27 (2.16)	5.07 (1.84)	4.93 (2.03)
12. “With-it-ness”	5.13 (0.96)	4.93 (0.9)	5.6 (0.67)	5.17 (1.23)	5.47 (0.9)	5.7 (0.84)
13. Rapport with students	5.70 (0.46)	5.3 (0.75)	5.83 (0.38)	5.63 (0.77)	5.77 (0.57)	5.90 (0.25)
14. Professionalism	5.74 (0.51)	5.80 (0.41)	5.80 (0.41)	5.43 (1.2)	5.67 (0.96)	5.90 (0.25)
Overall <u>M</u> ; (SD)	5.16 (1.01)	5.04 (1.30)	5.53 (1.02)	5.13 (1.40)	5.51 (1.03)	5.65 (0.89)

Results of the descriptive data revealed means of 4.75 to 5.74 and standard deviations ranging from 0.51-1.54 on the formal observation in Block II. Pre-service teachers in Block II struggled with items #5 (Lesson tied to previous learning), #8 (Management), and #11 (Transitions). Each of these areas was rated below 5.0.

Block III represented a significant increase in the complexity of coursework and the expectations in the practicum. Mean scores ranged from 4.2 to 5.8 for the first observation in Block III and from 4.8 to 5.83 for the mean scores on the second observation in Block III, representing an overall improvement. Pre-service teachers in Block III scored lower on items #1 (Goals and objectives), #4 (Gaining attention), #5 (Lesson tied to previous learning) and #11 (Transition) on the first formal observation. In the second formal observation, students continued to struggle with item #5 (Lesson tied to previous learning). Given the once-a-week full-day structure of the practicum, it was not surprising that pre-service teachers struggled with the continuity of instruction. They were essentially guests in the classroom.

As students progressed to Block IV, four items fell below a mean of 5.0 for the first of three observations. In Block IV, results from the first formal observation ranged from 4.27 to 5.63, the

second formal observation mean scores ranged from 5.07 to 5.83, and the third formal observation mean scores indicated a range from 4.93 to 5.9, suggesting overall improvement. In Block IV, pre-service teachers continued to struggle with item #5 (Lesson tied to previous learning), item #7 (Student understanding), item #10 (Assessment), and item #11 (Transition). Pre-service teachers improved in these areas for the second and third observations, with only one mean score below 5.0 (item #11 Transition). Overall, pre-service teachers had problems with tying their lessons to previous learning (item #5) and creating smooth transitions between classroom activities (item #11). Again, these results may be a function of a once-a-week placement.

The overall highest mean score for Block IV suggested pre-service teachers used the feedback and observation data to improve instruction. However, the pre-service teachers also struggled when they moved from block to block as the performance expectations and complexity of the instruction increased.

Descriptive data revealed that pre-service teachers both thrived and struggled as they moved between blocks. The last formal observation (Block IV Obs 3) by university supervisors indicated that every item was over the 5.0 threshold, with a grand mean of 5.65 (SD=.89). A score of 5.0 was considered an important threshold as it represented proficiency. Using summative scores (sum of all scores on the observation rubric), regression analysis was used to determine if performance in Block II or Block III could predict Block IV Obs 3 performance. Results revealed that pre-service teacher performance in early blocks did not predict final performance as determined by university supervisors ($R=.428$; $R^2=.183$). Results suggested that pre-service teachers have the opportunity to improve and many do. Further, it appears that pre-service teachers need all of the formal observations and feedback to reach a level of high proficiency.

To further illustrate that pre-service teachers can improve over time with formal observation and feedback by university supervisors, a paired samples t-test was conducted on the summative data of the first formal observation conducted in Block II, with the final formal observation conducted in Block IV. Results suggested a significant difference in pre-service teacher performance from the first observation to the last ($t_{30}=3.94$; $p<.05$).

Results on Formal by Achievement Levels of Pre-service Teachers

Based on GPA, three subgroups were created. Pre-service teachers were divided into three achievement groups (high achievers, mid-level achievers, and low achievers). For this study, high achievers were those with GPAs ranging from 4.0 to 3.75 (n=9). Mid-level achievers had GPAs ranging from 3.74 to 3.25 (n=15), and low achievers had GPAs ranging from 3.24 and below (n=7). Low achievers were in good standing and performing satisfactorily in all coursework. Descriptive results of the subgroups are included in Table 2.

Table 2

Performance of Pre-service Teachers by Achievement Levels for Formal Observations and Final Evaluations.

Observations	Achievement Levels		
	High M (SD)	Mid-level M (SD)	Low M (SD)
<i>Block II</i>			
Formal Observation	5.3 (1.01)	5.23 (0.91)	4.7 (1.10)
Final Evaluation	6.58 (0.52)	6.45 (0.70)	5.13 (1.24)
<i>Block III</i>			
Formal Observation 1	5.17 (1.15)	5.07 (1.22)	4.79 (1.58)
Formal Observation 2	5.57 (1.02)	5.61 (1.00)	5.31 (1.06)
Final Evaluation	5.95 (1.47)	5.82 (1.96)	5.13 (1.78)
<i>Block IV</i>			
Formal Observation 1	5.4 (1.19)	5.53 (1.03)	3.92 (1.64)
Formal Observation 2	5.92 (0.30)	5.67 (0.78)	4.63 (1.50)
Formal Observation 3	5.86 (0.43)	5.32 (0.80)	5.07 (1.21)
Final Evaluation	6.25 (1.19)	5.99 (1.12)	4.77 (1.40)

Identified high achievers consistently received higher scores than their lower achieving colleagues. The identified low achievers received the lowest scores in the sample. Mean scores revealed that pre-service teachers identified as the low achievers struggled in the first formal observation by university supervisors each time they advanced to a new block in the program compared to high and mid-level achievers. Further, low achievers received lower scores from supervisors and lead teachers as they progressed through the blocks, suggesting that they did not adapt to the increasing expectations as easily as their colleagues.

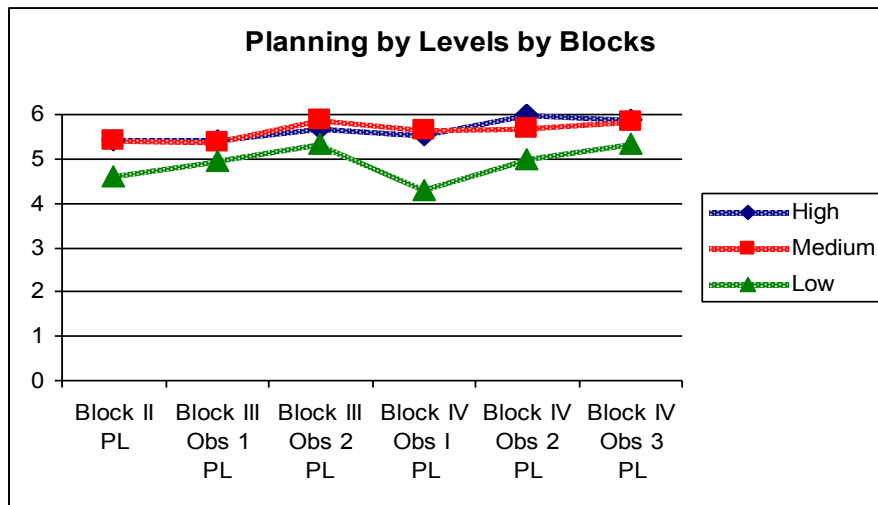
Composite Variables

Two composite variables were created from the formal observation form. Specific teaching behaviors, as indicated on the observation rubric are informative for novice teachers. In reality, teaching is a composite of behaviors, overlapping and intertwined. The purpose of the composite

variables was to mirror the complexity of teaching, but was not used for giving pre-service teachers feedback on their performance. Two composite variables were included in this study. Planning included items 1- 3, and *Teaching* was comprised of items 4- 10. Behaviors that comprised the composite variables can be found in Table 1.

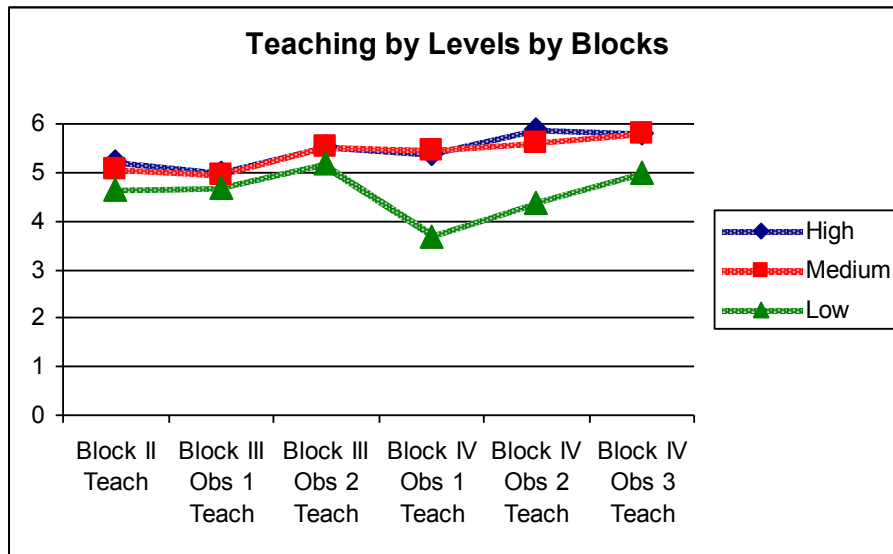
Planning. For high and medium achieving pre-service teachers entering Block II, Planning was not a challenge. Both groups scored at a level above 5.0 on a 6.0 scale (high- \underline{M} =5.41; SD =0.93: med- \underline{M} =5.42; SD =1.05). By the end of Block IV, high and medium achievers scored \underline{M} =5.89 and \underline{M} =5.84 respectively. On the other hand, low achieving students began Block II less skilled in planning than their colleagues (\underline{M} =4.60; SD =1.14). By the end of their practicum experiences, low achieving pre-service teachers crossed the 5.0 threshold (\underline{M} =5.33; SD = . 86). The low standard deviation suggests general improvement within this group. (See Figure 3).

Figure 3. Planning (PL) composite scores by achievement level and block.



Teaching. Pre-service teachers entering Block II scored lowest in *Teaching*. This was a lower area for all students. High achieving pre-service teachers began Block II with scores of \underline{M} =5.21; SD 1.17 and completed Block IV with scores of \underline{M} =5.81; SD =0.53. Low standard deviation suggests that there was very little variance among the group. Mid-level achievers also started Block II with the lowest score across all categories (\underline{M} =5.09; SD =0.76). As mid-level achievers moved to a new block, their teaching scores regressed (See Figure 3). Despite ebbs and flows, mid-level achievers finished their practicum experience in Block IV with \underline{M} =5.82; SD =0.50. With 6.0 a perfect score, the data reveal that mid-level achievers reached a level of high proficiency. Low achievers entered Block II with the same scores in Planning and Teaching. Lower achieving pre-service teachers did not struggle transitioning between Block II and III. However, the change to Block IV challenged lower achieving pre-service teachers (\underline{M} =3.69; SD 1.66). This group improved by the end of the block to nearly reach the threshold of 5.0 (\underline{M} =4.98; SD =1.05). This higher standard deviation suggests that some students continued to struggle (See Figure 4).

Figure 4. Teaching composite scores by achievement level and block.



Pre-service teachers began their practicum experiences with their lowest scores in teaching. As pre-service teachers moved to Block III, teaching remained the lowest area of proficiency. As pre-service teachers progressed through the program, teaching in Block IV showed ebbs and flows, with lower scores at the beginning of the semester and the highest scores at the end of Block IV, just before they entered student teaching. Overall, final observation scores showed that all the pre-service teachers reached a high level of proficiency.

Discussion

Field experiences for pre-service teachers have been widely touted as a critical component of quality teacher education. Further, increased time in schools, prior to student teaching or internship, has been recommended. ITEP was created with a strong practicum component that scaffolded the development of teachers from a less intensive to a more intensive experience in classrooms that modeled the full range of teaching responsibilities.

Pre-service teachers showed general improvement in their teaching skills as they progressed through the program. Pre-service teachers struggled as they moved between blocks, and the expectations and intensity of the teaching increased. These data suggest that with support and feedback, pre-service teachers can continue to develop as professionals and integrate their *knowledge of practice* into *knowledge in practice* as described by Cochran-Smith & Lytle (1999). Further, these data validate policy makers and researchers call for increased time in schools during teacher education (Hardman, 2007).

Providing university supervisors is costly. In a resource-depleted environment, it is essential to evaluate the value of university supervisors who provide multiple formal and informal observations and feedback conferences. In this study, the highest scores for formal observations occurred in Block IV suggesting that pre-service teachers used and incorporated feedback. In situations where they struggled, they were given enough support, practice and mentoring to reach the high expectations set for them. Performance in early blocks did not predict performance in Block IV.

Over the course of this study, high achieving students were high achieving pre-service teachers and they consistently performed at a higher level than mid-level and lower achieving peers. Interestingly, high achieving students plateaued and appeared ready for student teaching at least one semester earlier than lower achieving peers. When resources are limited, a differentiated instruction model may need to be employed. Lower achievers improved throughout the program, except in Block IV. They did not reach the levels of their high achieving colleagues, but they reached a high performing level. Most importantly, none of these students struggled during student teaching, with all 31 identified as program completers.

ITEP used an observation schedule that intensified as pre-service teachers moved between blocks. There was one formal observation and two informal observations in Block II, but three formal observations and one informal observation in Block IV. Because students met program expectations, the structure of the schedule may need to be reconsidered. For example, for lower achieving pre-service teachers it may make sense to formally observe them more frequently in Block II. Since Block IV was challenging, should more be done in Block II and III to prepare pre-service teachers for Block IV? Professionalism for lower achieving pre-service teachers dropped in Block IV. The concern is that there are stressors in this block to which pre-service teachers are struggling to adapt. Consequently, their professional dispositions suffer prior to their student teaching.

In this study, GPA was predictive of performance in field experience. Identifying students who may need additional support in their field experience at critical junctures (beginning of Block III) may elevate performance. Future studies should consider examining the relationship of PRAXIS I scores and teaching performance. Finally, program requirements for admitting students should consider GPA as an important component in the selection process.

In 2008, ITEP was identified as being a model program for preparing elementary/special education teachers. The 10 credits of field experience, or 300 hours prior to student teaching, was identified as exemplary (Blanton & Pugach, 2008). During fiscal challenges, it is important to thoughtfully examine program evaluation data and determine the best use of limited resources. As Dymond, Rengzaglia, Halle, Chadsey & Bentz (2008) note, supervision is the most expensive component of a teacher education program, because it is typically delivered on an individualized basis. That said, it may be money well spent. Future research needs to examine the link between pre-service teacher field experiences and teacher effectiveness during the first and second year of teaching.

About the Authors

Dr. Tammy Abernathy is a Professor in the Special Education Program at the University of Nevada. Within the field of special education, she focuses on teacher education, learning disabilities, secondary special education and developing self-determination skills for adolescents with disabilities.

Dr. Ginny Beck is a Program Coordinator for Special Education in Washoe County School District supporting schools and classroom teachers. She is adjunct faculty in the Special Education Program at the University of Nevada.

Dr. Shanon Taylor is an Associate Professor in the Special Education Program at the University of Nevada. Within the field of special education, she focuses on teacher education, behavior management, behavior disorders, and autism.

References

- Abernathy, T. V. & Taylor, S. S. (2013). Structuring a teacher education program for faculty collaboration and second-order change. *Journal of Educational Leadership in Action*, 1(1).
- American Association of Colleges for Teacher Education. (2010, March). *The clinical preparation of teachers: A policy brief*. Washington, DC.
- Billingsley, B., Carlson, E., & Klein, S. (2004). The working conditions and induction support of early special educators. *Exceptional Children*, 70(3), 333-347.
- Blanton, L., & Pugach, M. (2007). Collaborative programs in general and special teacher education: An action guide for higher education and policy makers. Center for Improving Teacher Quality: U.S. Department of Education, Office of Special Education Programs, 1-65.
- Blanton, L.P., Pugach, M.C., & Florian, L. (2011). Preparing general education teachers to improve outcomes for students with disabilities. Prepared for AACTE and NCLD. www.aacte.org
- Brownell, M., Ross, D., Colon, E., & McCallum, C. (2005). Critical features of special education teacher preparation: A comparison with general teacher education. *The Journal of Special Education*, 38(4), 242-252.
- Cochran-Smith, M., & Lytle, S. (1999). Relationships of knowledge and practice: Teacher learning in community. *Review of Research in Education*, 24, 249-305.
- Denton, J. (1982). Early field experience influence on performance in subsequent coursework. *Journal of Teacher education*, 33(2), 19-23.
- Dymond, S.K., Renzaglia, A., Halle, J.W., Chadsey, J., & Bentz, J.L. (2008). An evaluation of videoconferencing as a supportive technology for practicum supervision. *Teacher Education and Special Education*, 31(4), 243 – 256.
- Fayne, H. (2007). Supervision from the student teacher’s perspective: An institutional case study. *Studying Teacher Education*, 3(1), 53-66.
- Florian, L. (2009). Preparing teachers to work in “schools for all.” *Teaching and Teacher Education*, 25(4), 553-554.
- Hardman, M. (2007). *Redesigning the preparation of general and special education teachers: Collaboration within a school-wide system of support*. Testimony given before the Committee on Education and Labor Subcommittee on Early Childhood, Elementary and Secondary Education, U.S. House of Representatives.

- Kim, M., Andrews, R., & Carr, D. (2004). Traditional versus integrated preservice teacher education curriculum. *Journal of Teacher Education*, 55(4), 341-356.
- McLeskey, J., & Ross, D. (2004). The politics of teacher education in the new millennium: Implications for special education teacher educators. *Teacher Education and Special Education*, 27(4), 342-349.
- National Council for Accreditation of Teacher Education (2010). *Transforming teacher education through clinical practice: A national strategy to prepare effective teachers*. Washington, DC.
- National Comprehensive Center on Teacher Quality (2010). State Data. Retrieved from: <http://www2.tqsource.org/mb2dev/reports/Reporttq.aspx?id=1542&map=0>. Retrieved June 20, 2008.
- Ross, D. & Blanton, L. (2004). Inquiry communities in special education teacher education. *Teacher Education and Special Education*, 27(1), 15-23.
- Shephard, L., Hammerness, K., Darling-Hammond, L., Rust, F., Snowden, J., Gordon, E., et al. (2005). Assessment. In L. Darling-Hammond & J. Bradsford (Eds.), *Preparing teachers for a changing world: What teachers should be able to do* (pp.275-326). San Francisco: Jossey-Bass.
- Vescio, V., Ross, D., & Adams, A. (2008). A review of research on the impact of professional learning communities on teaching practice and student learning. *Teaching and Teacher Education*, 24(1), 80-91.
- Van Laarhoven, T.R., Munk, D.D., Lynch, K., Bosma, J., Rouse, J. (2007). A model for preparing special and general education preservice teachers for inclusive education. *Journal of Teacher Education*, 58 (5), 440-455.

Math remediation? – Success is Possible!

Dr. Deborah Banker and Dr. Stella Filizola

Remediation of mathematics skills has been a topic of controversy for decades. According to Thompson (2008), there is no doubt that there needs to be more experimental research done in mathematics education regarding how to best teach mathematics to students so there is no need for remediation. The National Mathematics Advisory Panel submitted a report in 2008 in response to President George W. Bush's request to examine "the critical skills and skill progressions for students to acquire competence in algebra and readiness for higher levels of mathematics" (National Mathematics Advisory Panel, 2008, pg. 71). Within the context of the report, the Panel offers that a valued part of mathematical knowledge is the "Conceptual understanding of mathematical operations, fluent execution of procedures, and fast access to number combinations together support effective and efficient problem solving" (NMAP, 2008, pg. 26). The question that remains is how to best teach the understanding of mathematical operations, fluent execution of procedures and fast access to number combinations, and what happens if a student does not achieve those skills.

The report does narrow its recommendations to "addressing the teaching and learning of mathematics from preschool to Grade 8" (NMAP, 2008, pg. 8). It further states that "By the end of Grade 6, students should be proficient with multiplication and division of fractions and decimals" (NMAP, 2008, pg.20) but does nothing to address if the student does not achieve the required skills and concepts. This leaves practitioners in a quandary, especially those who are given the task of teaching the pre-algebra skill set to students who have not yet mastered the elementary skills.

Practitioners involved in this study applied an integrated, and therefore compound, approach to remediating intervention of the mathematics skills of 7th grade students who had not yet mastered the elementary level skills necessary to advance to pre-algebra. The task was to teach remediation of the elementary level skills and to teach the pre-algebra skills simultaneously. The approach used printed curriculum materials and a technology-based program that was aligned with the curriculum materials to provide a blended learning environment. The technology-based component became part of the infrastructure of the intervention.

The purpose of the study was that to determine the effectiveness of using a technology-based program with the remedial math students. As such, the directional hypothesis was that the numerical operations achievement of the experimental group using the technology-based program would be higher than the numerical operations achievement of the control group.

Theoretical Framework

The technology-based component selected for use is known as Assessment and Learning in Knowledge Spaces (ALEKS). Based on the Knowledge Space Theory developed by Dr. Jean-Claude Falmagne, ALEKS uses an artificial intelligence to "individually and continually assess each student." This is also known as branching or learning paths (Albert & Hockemeyer, 1997). The program can determine the student's current achievement level and then tailor remediation dependent upon his or her current abilities. The knowledge space theory coincides with the master learning theory in which students learn at different rates and instruction needs to accommodate these different rates to allow flexibility in the time needed for students to master each concept (Martinez, 2010).

Literature Review

Success in middle school mathematics has been linked to success in other parts of a person's life. Horn and Nunez (2000) found that students who took high math level courses were statistically more probable to go to college even if their parents had not attended college. According to a U.S. Department of Education study (1999), the most influential factor in deciding if a student will finish college, even more so than a high grade point average or socioeconomic status, is whether the student took advanced mathematics classes before college. Success in life or better job opportunities has also been linked with persons who took advanced mathematics courses (Algozzine, OShea, Crews & Stoddard, 1987; Maccini, McNaughton & Ruhl, 1999; Xin, Jitendra, & Deatline-Buchman, 2005). Therefore, everything possible should be done to ensure that the majority of students are prepared for upper level mathematics courses.

Lately, the need for a study of middle school curriculum has been emphasized due to the fact that scores in the United States have been decreasing, especially in comparison with other countries (Riordan & Noyce, 2001). Research is needed to find what works for students who struggle with mathematics (Schmidt, Houng, & Cogan, 2002). One of the ways that instruction can be delivered is through the use of a technology-based program. One of the advantages of using a technology-based program is that a student can do the work both at home and in school using easily accessible lessons. Research has also found that technology-based mathematical instruction can have a positive effect on the amount of learning that takes place (Goldenberg & Cuoco, 1996, Russell, 1997, Sanders, 2001). The use of a technology-based program can accommodate a variety of learning styles (Hawkins, 1993, Schank, 1993). Students are more capable to resolve critical thinking problems in mathematics with a greater level of proficiency (Hawkins, 1993, Schank, 1993, Nicaise, 1997). Finally, technology-based programs can greatly benefit those students who have learning differences (Babbitt & Miller, 1996).

ALEKS

Each student in the experimental group was required to buy an individual subscription to the ALEKS software program. As mentioned previously, ALEKS is a computer software program (all Java web-based system) developed in conjunction with an NSF grant based on the Knowledge Space Theory. ALEKS has an artificial intelligence assessment system to determine where to start each individual student in the experimental group in the ALEKS program with respect to the student's knowledge of numerical skills. The program uses adaptive questioning for its initial assessment to find out what a student knows and doesn't know. The results are then presented to the student in a multicolored pie chart, with sections of the pie representing varying concept areas. As a student progresses through the program and successfully completes problems in the concept areas, the different colored sections of the pie representing the concepts will gradually fill in. After the initial assessment, ALEKS presents the student with a choice of topics. Within those topics are practice problems for the student to master. If the student cannot complete a problem successfully, the program will provide a complete explanation of how to solve the problem. The program also has an option for the student to request the explanation in Spanish. As there are no multiple-choice answers for the student to determine the solution, the possibility of correct guessing is removed. The program will then change the problem for the student to attempt the concept again. The program will also periodically reassess previously learned concepts to ensure the learner has retained the content. It is also to be noted that the ALEKS program can be customized so that it will align with the most commonly used mathematics textbooks. In addition, teachers and administrators have

access to a secure webpage within the ALEKS program to be able to keep track of students' progress (UC Regents & ALEKS Corp., 2010).

Methodology

Research Design

The authors conducted an action research pilot study using a quasi-experimental research design. More specifically, the non-equivalent control-group design was used to analyze the data. This design was selected because the intent of the research is to compare groups of research participants who are not randomly assigned to the experimental and control groups, and both groups take a pretest and a posttest.

Participants

The participants in the study were in the seventh grade class of a private parochial college preparatory academy. Students who attend this academy live in a Texas border city and in a city directly across from the Mexican border. The students who come from the United States are primarily of Hispanic origin. The students who come from Mexico make up about forty percent of the school population and have attended American schools since first grade. Many of them plan to continue their education in the United States.

The students in the experimental group were those who participated in using the ALEKS computer program for mathematics. All of them were in the seventh grade and they had to pay a fee to use ALEKS for three months. This group consisted of 13 female and 2 male students, and they were in a remedial math class; participation was determined by their math scores on the Mathematical Subtest of the *Education Development Basic Skills Tests* administered by the academy as the entrance exam. The Mathematical Subtest assesses a student's performance in basic mathematical computation skills and concepts (Scholastic Testing Services, 2010). The students who were in the control group were also in the seventh grade, but their scores on the entrance exam were actually higher than those in the experimental group. The control group only took the pretest and the posttest; they did not use ALEKS. The control group participants were made up of 9 male and 7 female students

Table 1 shows the makeup of the students in the experimental group that was matched with similar students in the control group.

Table 1.

Participants in Experimental Group

	Hispanic	Other	Total
Males	2	0	2
Females	11	2	13
Total	13	2	15

Table 2 shows the makeup of the students in the control group.

Table 2.

Participants in Control Group

	Hispanic	Other	Total
Males	9	0	9
Females	6	1	7
Total	15	1	16

Instrumentation

The assessment instrument used for the pretest and posttest was the Numerical Operations subtest of the Wechsler Individual Achievement Test, 2nd edition (WIAT-II). The reason for selecting the WIAT-II is that it is nationally normed from a stratified sample, designed for individuals between the ages of 5 and 19 years of age, and has excellent reliability and validity. The Numerical Operations subtest assesses skills involving solving computation problems including mixed fractions, negative two-digit integers, and linear equations; the exact areas in which the experimental students demonstrated lower achievement.

Treatment

Students in this study were not randomly selected for the classes in which they were enrolled. As part of the entrance exam to be accepted for enrollment into the private parochial school, all students were administered the *Basic Skills Test*. Based on a predetermined cut score, 7th grade students were assigned to either the pre-algebra classes or to the Math 7 (remedial) class. One of the pre-algebra classes was selected at random to be the control group, and the Math 7 class was the experimental group. Both the control group and the experimental group were taught by the same teacher.

The students in the experimental group used the school's computer lab and participated in completing the ALEKS diagnostic assessment and took the WIAT-II Numerical Operations subtest (the pre-test) the second week of school. The same day the experimental group participated in these assessments, the control group was administered just the WIAT-II Numerical Operations subtest (the pre-test). The reason for the administration of the WIAT-II Numerical Operations Subtest was to ensure that the achievement measurement was determined by a well-standardized instrument with strong reliability and validity. During the next three months, the students in the experimental group were taken to the school's computer lab during their normal Math 7 class on Mondays, Wednesdays, and Fridays. While in the computer lab, the students used the ALEKS software to remediate their numerical skills for 30 to 45 minutes per session. The students received their regular teacher classroom instruction on Tuesdays and Thursdays for pre-algebra skills. At the end of the three month period, the experimental group and the control group were administered the WIAT-II Numerical Operations subtest (the post-test). It is to be noted that both the control group and the experimental group had math class five days per week.

Findings and Limitations

The results of the pilot study reveal that the hypothesis was satisfied. The experimental group using the ALEKS software program showed higher numerical skills achievement than the control group as measured by the Numerical Operations subtest of the WIAT-II. The study's

findings are limited in that this is a pilot study based on a small sample population located within one school, in one geographic location. Therefore, generalization of the findings should not extend beyond the scope of this study. An additional threat to the validity of this study is that the participants were not randomly selected and were not matched. Also the researchers were not able to control extraneous factors to include students in the experimental group receiving additional tutoring assistance outside of school hours for numerical skills remediation.

Implications and Recommendations

Several implications for practice and for future research are warranted by these data. This study found that students who were lacking basic numeric operations skills and who were assisted by a technology-based mathematics program can be brought up to the same skill level as those students who already had the basic numeric operations skills. A variety of technology-based programs are available, but choosing a program that requires students to do the work and not try to guess with multiple-choice questions (like ALEKS) would be the best option. Because there is such an array of programs, a study of more than one of these programs would help any school find the one that best fits its particular population of students.

Success in the classroom is not only uplifting for both students and teachers. Teachers want students to succeed and when this takes place teachers leave the classroom with a positive feeling of themselves and their students. Using a technology-based program that fits a group of students' needs benefits students and teachers, it also addresses the learning needs of the current population of students who are digital natives and who respond extremely well to technology based learning. As technology becomes more readily available to all schools, it will be a definite advantage to students to learn in a blended learning environment where more individualized instruction can be used, especially for those students whose skills need remediation.

About the Authors

Dr. Deborah Banker is currently an Assistant Professor in the department of Teacher Education at Angelo State University. Dr. Stella Filizola is the department chair for mathematics at Saint Joseph Academy in Brownsville, TX.

References

- Adelman, C. (1999). Answers in the tool box: Academic intensity, attendance patterns and bachelor's degree attainment. Washington, DC: U. S. Department of Education, Office of Educational Research. Retrieved from: <http://ed.gov/pubs/Toolbox>.
- Albert, D. & Hockemeyer, C. (1997). Adaptive and dynamic hypertext tutoring systems based on Knowledge Space Theory. *Artificial Intelligence in Education*, 8(44).
- Algozzine, B., O'Shea, D. J., Crews, W. B., & Stoddard, K. (1987). Analysis of mathematics competence of learning disabled adolescents. *Journal of Special Education*, 21, 97-107.

- Babbitt, B. C., & Miller, S. P. (1996). Using hypermedia to improve the mathematics problem-solving skills of students with learning disabilities. *Journal of Learning Disabilities*, 29, 391-401.
- Bahr, P.R. (2008). Does mathematics remediation work?: A comparative analysis of academic attainment among community college students. *Research of Higher Education*, 49, 420-450.
- Goldenberg, E. P., & Cuoco, A. (1996). What is dynamic geometry? In R. Lehler & D. Chazan (Eds.). *Designing learning environments for developing understanding of geometry and Space* (pp. 381-420). Hillsdale, NJ: Erlbaum.
- Greenhow, C., Robelia, B. & Hughes, J.E. (2009). Web 2.0 and classroom research: What path should we take now? *Educational Researcher*, 38(4), 246-257.
- Gresalfi, M., Martin, T., Hand, V., & Greeno, J. (2009). Constructing competence: An analysis of student participation in the activity systems of mathematics classrooms. *Educational Studies of Mathematics*, 70, 49-70.
- Hanley, T.V. (2005). Commentary on early identification and interventions for students with mathematical difficulties: Make sense-do the math. *Journal of Learning Disabilities*, 38(4), 346-349.
- Hawkins, J. (1993). Technology and the organization of schooling. *Communication of the ACM*, 36(5), 30-34.
- Horn, L., & Nunez, A. M. (2000). *Mapping the road to college: First-generation students' math track, planning strategies and context of support (NCES 2000-153)*. Washington, DC: U. S. Department of Education. Retrieved from: <http://nces.ed.gov/pubs2000/2000153>.
- Lobato, J. (2008). On learning processes and the National Mathematics Advisory Panel report. *Educational Researcher*, 37(9), 595-600.
- Mabbott, D.J., Bisanz, J. (2008). Computational skills, working memory, and conceptual knowledge in older children with mathematics learning disabilities. *Journal of Learning Disabilities*, 41(1), 15-28.
- Maccini, P., McNaughton, D., & Ruhl, K. I. (1999). Algebra instruction for students with learning disabilities: Implications from a research review. *Learning Disability Quarterly*, 22(2), 113-126.
- Martinez, M. E., (2010). *Learning and cognition: The design of the mind*. Upper Saddle River, NJ: Merrill.
- National Institutes of Health. (2013). *First grade math skills set foundation for later math ability*. Retrieved from: <http://www.nih.gov/news/health/feb2013/nichd-27.htm>

- Nicaise, M., (1997). Computer supported apprenticeships in math and science. *The Journal of Computers in Mathematics and Science Teaching*, 16(4), 443-465.
- Riordan, J. E., Noyce, P. E. (2001). The impact of two standards-based mathematics curricula on students achievement in Massachusetts. *Journal for Research in Mathematics Education*, 32, 368-398.
- Roschelle, J., Singleton, C., Sabelli, N., Pea, R., & Bransford, J.D. (2008). Mathematics worth knowing, resources worth growing, research worth noting: A response to the National Mathematics Advisory Panel report. *Educational Researcher*, 37(9), 610-616.
- Russell, T. (1997). Teaching teachers: How I teach IS the message. In J. Loughran & T. Russell (Eds). *Teaching about teaching: Purpose, passion and pedagogy in teacher education* (pp.32-47). London: Falmer.
- Sanders, W. B. (2001). *Creating learning –centered courses for the world wide web*. Boston & London: Allyn and Bacon.
- Sattler, J.M. (2001). *Assessment of Children: Cognitive Applications, 4th ed.*, La Mesa, CA: Jerome M. Sattler, Publisher, Inc.
- Schank, R. C. (1993). Learning via multimedia computers. *Communications of the ACM*, 36(1), 54-56.
- Schmidt, W., Houang, R., & Cogan, I. (2002, Summer). A coherent curriculum: The case of mathematics. *American Educator*, 1-17.
- Scholastic Testing Services, Inc. (2010). <http://stservices.com>.
- Thompson, P.W. (2008). Professional judgment and the National Mathematics Advisory Panel report: Curricular content. *Educational Researcher*, 37(9), 582-585.
- Xin, Y. P., Jitendra, A. K., Deatline- Buchman, A. (2005). Effects of mathematical word problem-solving instruction in middle school students with learning problems. *The Journal of Special Education*, 39, 181-192.
- UC Regents and ALEKS Corporation. (2010, July 7). *Overview of ALEKS*. Retrieved from: <http://www.aleks.com>.

Improving Pre-Service Teacher Dispositions

Dr. Marcia Bolton and Dr. Dana Reisboard

Becoming a professional educator is a developmental and ongoing process that requires time for reflection upon experiences and advice from mentors. Few neophytes are master classroom teachers before they enter the classroom. Becoming a master teacher takes time and experience (Lamson & Aldrich, 2003). While experiences over time are a key ingredient, skills and dispositions are cultivatable within a social context under the mentorship of expert others. Teacher education coursework must prepare competent teachers who have also attained and developed dispositions consistent with those suggested by National Council for Accreditation of Teacher Education (NCATE) and The Interstate Teacher Assessment and Support Consortium (INTASC) (Jung & Rhodes, 2008). The Center for Education at Our University (pseudonym) assumes a holistic view of teacher dispositions and focuses on character and competency related dispositions (Jung & Rhodes, 2008). While it is our goal to develop and assess teacher dispositions, we remain cognizant, as discussed by Nelson (2002), that the best teachers are products of the synergy of essentially unpredictable factors such as background experiences, personal values, and learned theoretical factors gained while participating in teacher preparation methods courses.

Our University realizes its responsibility to convey, model, and promote positive standards of professional conduct. Also, a part of every field experience and student teaching placements are screening and assessment procedures to assure teacher candidates with negative dispositions that may be at odds with professional standards are not permitted to persist. Reflection and evaluation of dispositions are the way to identify meaningful, cultivatable, and competence related dispositions that are essential to skilled thinking and teaching. Faculty and students investigate how to systematically assess the development of appropriate professional dispositions so they can become a natural part of the professional educator that enters the classroom.

What are dispositions?

Dispositions have been defined by NCATE (2002) as the values, commitments, and professional ethics that influence behaviors toward students, families, colleagues, and communities and affect student learning, motivation, and development as well as the educator's own professional growth. NCATE further defines effective teachers as those who possess content knowledge in their subject area, pedagogical skills, and positive dispositions. Dispositions are at the 'being' or center of a person, and the faculty at teacher preparation institutions is there to strengthen certain dispositions (Freeman, 2004).

Just as thinking is shaped by progression through teacher preparation programs, dispositions and behaviors are shaped by faculty modeling, discussions, pedagogy, and field experiences. Reflective thinking on the part of the pre-service teacher is also crucial. When students are asked to evaluate their behaviors while in the field, they are showing critical thinking skills and can pinpoint areas that may need strengthening or affirmation. Students at Our University are asked to evaluate themselves in various reflective writings and discussions beginning in their very first education class, but as this paper highlights, one way was through a rubric in their electronic portfolios. As stated by Jung & Rhodes (2008), "dispositions are a dimension of personality, either latent or conscious, that are controllable human responses."

The authors note dispositions are habitually changing natures, which include both behaviors and actions. These human qualities can be acquired and cultivated through educational experience and are manifested through education, training, and modeling (Dewey, 1916, 1922; Jung & Rhodes, 2008). Critical thinking should be taught as an integral aspect of a course of study in addition to acquiring a deep understanding of specific content (Cubukcu & Osmangazi, 2006). As discussed by Facione & Facione (2010), professional judgment is the result of the sound use of critical thinking skills.

Thinking is a disposition, according to Cubukcu & Osmangazi (2006), that can and should be taught. Noting a person's thinking dispositions and their efficiency can be improved by using good thinking tools. These authors stress the need to optimize teaching candidates' thinking skills to include transfers of knowledge and higher order thinking strategies.

Teaching involves more than effective planning, instructional knowledge, and teaching skills. It also extends to professional dispositions. Dispositions are similar to professional beliefs or values systems, but they are more than that. Dispositions extend to professional modes of conduct and the ways in which beliefs and attitudes are displayed by teachers' actions in and out of the classroom. Teachers with positive professional dispositions tend to act in ways that elevate the profession of teaching in the eyes of others (Ros-Voseles & Moss, 2007). Much confusion surrounds disposition development and assessment. This problem has much to do with the semantic confusion that exists within the realm of teacher education, particularly around teacher dispositions. Literature from both the academic and professional fields focused attention on the moral dimensions of teaching and the ethical demands they place on the daily practice of teachers. "In teaching... core principles relating to virtues such as honesty, justice, fairness, care, empathy, integrity, courage, respect, and responsibility should guide conduct and interpersonal relations" (Campbell, 2006). Within educational literature, the term disposition is often used interchangeably with attitudes, beliefs, self concepts, self efficacy, predispositions, work ethics, feelings, morals, behaviors, skills, intentions, competence, or values (Callahan, Wasicsko, & Wirtz, 2004; Campbell, 2006). Additionally, teacher education programs use different assessment tools to describe and assess concepts with the same names. Adding to this confusion are disposition assessment terms that have multiple meanings and are used for different purposes within and across teacher education programs (Nortar, Riley, Taylor, Thornburg, & Cargil 2009). When discussing dispositions, it is also imperative to understand the definition of desirable dispositions is contextual and dynamic.

Why attend to teacher dispositions?

The possession of positive dispositions helps to ensure that teachers are better able to deliver instructional services to children. Teachers are behavioral role models to the students they teach (Levin, & Nolan, 2010). Cubukcu & Osmangazi, (2006, p. 3) discuss the widespread desire of teacher educators to develop general thinking dispositions, particularly critical thinking dispositions, and note students fail to acquire these dispositions as much as they could and should. Lamson, Aldrich, & Kelli (2003) identify social inquiry as an effective method for enhancing dispositions appropriate for pre-service education candidates. In particular, they suggest role playing to allow pre-service teachers opportunities to test their *teacher voices* and explore new roles. "Squirms," situations that make students squirm, are also used to illicit reactions and prompt responses (Lamson, Aldrick, & Thomas, 2003). Extended field placement opportunities offered to Our University students provide additional opportunities for pre-service teachers to explore their role as a teacher and develop necessary dispositions in a safe and supportive environment.

Disposition Assessment

Several problems are inherent in disposition assessment, even once semantic confusion and definitions are clarified. First and foremost, we cannot articulate all of the desirable and undesirable characteristics that make up a teacher. Additionally, Jung and Rhodes (2008) discuss the need to assess behavioral components while assessing dispositions, because people need to have certain competencies to reveal dispositions in certain behaviors. Which dispositions should be most valued and cultivated also remains unclear (Jung & Rhodes, 2008, p. 655)

Nelson (2002) presents additional difficulties with disposition assessment. He asserts that laying aside our subjectivity is not easy, and questions our ability to recognize our own bias. He suggests that a danger exists in our attempts to produce lists of dispositions that might be interpreted as attempts to produce an army of “correct” individuals, in direct contradiction with our claim that we respect and embrace diversity. Nelson (2002) further cautions that we must ensure that our need for systematicity does not lead to conformity. Assessing dispositions is difficult. Despite ongoing efforts of teacher educators and policy makers, the assessment of dispositions continues to be a challenge. While teacher education programs can prepare teachers to be more competent professionals, the question remains whether teacher preparation programs can greatly influence how a teacher candidate thinks about their profession or create change if the need arises (Nelson, 2002).

Background

Critical Thinking and Dispositions

Critical dispositions are significantly related to a person’s ability to change his/her mode of behavioral functioning in order to adapt to situational constraints (Yeh, 2002). Reflective judgments are the focus of critical thinking (Facione & Facione, 2010). Proficient critical thinking requires the development of habits of mind that demand excellence in reflective judgment. Dispositions are an essential part of critical thinking and should be taught as an integral aspect of a course of study for teachers in training. Teachers must have a deep understanding of specific content but are also required to make inferences and reflective judgments about how content is taught during the course of the instructional day (Cubukcu & Osmangazi, 2006; Facione & Facione, 2010). Skilled reflective teachers are proficient at addressing problems and are skilled in making judgments that define interpersonal interactions.

GATEKeepers

Role of Dispositions

As professionals who are desperately seeking ways to improve our educational system and preparation programs for the field, educators in institutes of higher education should explore new areas and ways to assess dispositions. One day, the candidates will become the professional in the classroom and will need to be adequately and professionally prepared in all areas.

The Pennsylvania Department of Education (PDE) requires pre-service and in-service teachers in Pennsylvania to act in accordance with *Pennsylvania’s Code of Professional Practice and Conduct for Educators* (PDE, 1991). The PDE program evaluation guidelines include *professionalism* as a required attribute of *all* teacher education candidates and note that programs

must provide evidence that their students demonstrate professionalism in keeping with the Pennsylvania Code of Conduct (NCATE 2001; PDE, 2011).

Our University Teacher Dispositions

Our University has 5 dispositions required of teacher candidates as they participate in field experiences, classroom instruction, and student teaching. These dispositions are: enthusiasm for learning and commitment to teaching, attendance and punctuality, favorable reaction to critical feedback, collaboration with colleagues and peers, and dressing and assuming the role of a professional. The Teacher Education Council (TEC) and Office of Certification and Student Teaching promote and assess teacher education candidates' dispositions and respond to negative dispositions. These two entities, made up of the faculty who teach our courses and supervise candidates in the field placements, are responsible for collecting anecdotal notes or other forms of data, such as a rubric evaluation used for this study, for the purpose of providing updates to the monitoring team on individual students. Students monitor themselves through reflective writing. A pilot study conducted for this paper used a rubric (Appendix A) within the electronic portfolio so students could self-evaluate and monitor their dispositions in their field placements.

Candidates that realize assessments will occur regularly realize the need for change and are led to change actions and patterns of professional conduct. The opposite is also believed; if behaviors are affirmed and supported, those actions will stay in place and become automatic and fossilized (Lyons & Pinnell, 2001; Tharp & Gallimore, 1988). The faculty at our university espouses that teachers should be role models and model positive behaviors for their students. Pennsylvania State Department of Education's Code of Conduct states:

Professional practices are behaviors and attitudes that are based on a set of values that the professional education community believes and accepts. These values are evidenced by the professional educator's conduct toward students and colleagues, and the educator's employer and community. When teacher candidates become professional educators in this Commonwealth, they are expected to abide by this section (2011, p. 1).

Our University teacher candidates learn the definitions of expected teacher candidate conduct, dispositions, in their first education course. The dispositional requirements and expectations are consistently included and monitored within the curriculum and expectations of each education course throughout the teacher candidate program.

Further, candidates that demonstrate negative dispositions or unprofessional conduct are counseled and provided tutoring in expected behaviors. Assistance by the expert or "experienced other" leads the candidate to reflective practices that result in positive changes (Tharp & Gallimore, 1988).

Our University and Electronic Portfolios

At Our University, teacher candidates assess their dispositions at major transition points throughout the portfolio development process. This formative assessment contributes to teacher candidates' professional development and lifelong learning (Appendix A). The process of developing electronic teaching portfolios documents evidence of teacher candidate competencies and guide candidate advancement. Barret (2000) stated, "the primary suppositions for electronic portfolios are: 1. a portfolio is not a haphazard collection of artifacts, but a reflective tool that demonstrates growth over time; and 2) portfolios provide evidence of successful teaching."

Providing teacher candidates with an opportunity to engage in self-reflection provides formative assessment opportunities.

Our University distributed the rubric in appendix A to 5 classes of students in teacher preparation courses. Freshmen, sophomores, and juniors were given the rubric to evaluate their dispositions while in their field placements. The rubric was developed to provide the students with a tool to assess not only their reflective skills but also to judge whether critical thinking skills change during the teacher preparation program. To gather qualitative data on a pilot group, Our University created a rubric for candidates to self-evaluate their progress toward achieving our defined professional dispositions (Gall, Gall, & Borg, 2006). We collected 50 completed rubrics from freshmen, sophomores, and junior class members who were asked to rate themselves on a Likert scale with these designations: 1= insufficient, 2 = emergent, 3 = proficient and 4 = distinguished (Appendix A). Students were also encouraged to make written comments or attach artifacts, which none of them chose to complete. The students were given instructions to complete the paper rubric and place them in an envelope that was sealed and returned to the chosen faculty representative.

Data from the pilot study offers a set of relational guidelines as a guide to potential users to evaluate the electronic portfolios of pre-service teachers:

Guideline 1: Teacher preparation programs should explore new areas and ways to assess dispositions.

- The use of electronic portfolios and rubrics increases teacher candidate expertise in the use of 21st century skills (Barrett, 2000).
- Effective monitoring can occur if teacher candidates assess their thinking along major transition/evaluation points.
- Faculty who monitor candidate dispositions can access the student's responses along a continuum throughout their teacher preparation program and pinpoint areas of strengths and weaknesses.

Guideline 2: Critical dispositions are significantly related to a person's ability to change his/her mode of behavioral functioning in order to adapt to situational constraints (Yeh, 2002).

- Freshmen and sophomore chose the distinguished rating more often in every category. The same students changed their answers when given the exact same rubric in the next year of their program.
- Juniors chose the emergent rating more often than freshmen and sophomores, indicating more reflective thought on the rubric criteria.
- Information developed and learned during social inquiry experiences is retained at a higher rate than the same information given in a singular intake method, such as reading or attending a lecture (Lamson, Aldrick, & Thomas, 2003). Juniors showed their *learning* about professional dispositions by becoming more reflective.

Guideline 3: The rubric included within the electronic portfolio demonstrates confidence in the students' abilities to adequately evaluate their own critical thinking and dispositions.

- Completion of the rubric within a student portfolio communicates confidence from the faculty and communicates high expectations for critical thinking from candidates.

- Candidates were able to articulate their value assumptions about teaching and to test these assumptions safely within their portfolios.
- Feedback provided to individual candidates was solicited by the candidate or given as the need arose.

Conclusion

The difference between this small sample groups' answers in one year of growth signifies behaviors and thoughts about professional dispositions did change. Although it is not appropriate to assert the differences in the data are due to any one factor, a change did occur as the students progressed through their teacher preparation program. This small change can signify teacher candidates are reflective about their dispositions and can critically evaluate themselves.

By affording the opportunity for candidates and faculty to reflect and look in depth into this different way to assess professional dispositions, Our University fulfilled the goal of sampling ways to assess dispositions. Teacher candidates are able to work with students, families, and communities in ways that reflect the dispositions expected of professional educators as delineated in professional, state, and institutional standards. Using the electronic portfolio rubric for additional data on candidate dispositions further illuminates the dynamics associated with teacher candidate dispositions.

About the Authors

Dr. Marcia Bolton is an Associate Professor and the Director of Student Teaching and Intern Programs at Widener University. Dr. Dana Reisboard is an Assistant Professor in the School of Education, Innovation, and Continuing Studies at Widener University.

Appendix A

DISPOSITION SURVEY (Response is required)

Enthusiasm for Learning and Commitment to Teaching

PST Demonstrates the belief that all children can learn at high levels and is persistent in helping all children achieve success. PST is willing to engage in higher order thinking and promote it in students.

1	Insufficient	2	Emergent	3	Proficient	4	Distinguished
---	--------------	---	----------	---	------------	---	---------------

Attendance/Punctuality

Arrives and departs school at times agreed upon by supervisor/professor/cooperating teacher and adheres to district policy regarding breaks and record-keeping (i.e. time sheets, break rooms, etc.). When necessary, follows protocol for absences/tardiness by notifying professor/co-op/supervisor as agreed upon.

1	Insufficient	2	Emergent	3	Proficient	4	Distinguished
---	--------------	---	----------	---	------------	---	---------------

Reacts Favorably to Criticism

Pre-service teacher follows directions, seeks further clarification or additional feedback from the professor, cooperating teacher and/or supervisor. PST seeks to thoroughly understand the feedback they receive in order to be certain they can translate the feedback into action.

1	Insufficient	2	Emergent	3	Proficient	4	Distinguished
---	--------------	---	----------	---	------------	---	---------------

Collaboration with Colleagues

PSTs focus actively on problems and demonstrate the initiative to share ideas with other teachers through suggestions written into papers, reflective journals, sharing at meetings, receiving support for their ideas from their supervising professors or co-op teacher, or lesson plans.

1	Insufficient	2	Emergent	3	Proficient	4	Distinguished
---	--------------	---	----------	---	------------	---	---------------

Professional Dress & Language

PST follows Widener and school dress code. Professional language usage includes correct pronunciation, articulation, voice tone, and verbal and non-verbal communications while in the school. Profane language is not used in the classroom.

References

- Barrett, H. (2000). "Create Your Own Electronic Portfolio." *Learning & Leading with Technology* (April, 2000).
- Callahan, C. J., Wasiesko, M. M., & Wirtz, P. (2004). *Integrating dispositions into the conceptual framework: Four a priori questions*. Retrieved from <http://www.educatordispositions.org/dispositions/four%20a%20piori%20questions.pdf>
- Campbell, E. (2006). Ethical knowledge in teaching: A moral imperative of professionalism. *Education Canada*, 46(4), 32-35.
- Cubukcu, Z. & Osmangazi, E. (2006). Critical thinking dispositions of the Turkish teacher candidates. *The Turkish Online Journal of Educational Technology*, 5(4), 4.
- Dewey, J. (1922). *Human Nature and Conduct*. Modern Liberty Press, NY:NY.
- Dewey, J. (1916). *Democracy and Education: An Introduction to the Philosophy of Education*. Free Press, New York: NY.
- Facione, N. & Facione, P. (2010). *The California Critical Thinking Disposition Inventory Test Manual*. California Academic Press: Millbra, CA.
- Freeman, L. (2004). *Dispositions in teacher education*. Retrieved from <http://larryfreeman.net/aactedisp0207.pdf>.
- Gall, M. D., Gall, J. P., & Borg, W. R. (2006). *Educational Research: An Introduction* (8th ed). Boston: MA: Pearson, Allyn & Bacon.
- Jung, E. & Rhodes, D. (2008). Revisiting disposition assessment in teacher education: broadening the focus. *Assessment and Evaluation in Higher Education*, 33(6), p. 647-660.
- Lamson, S. & Aldrich, J., & Kelli, R. (2003). *Using social inquiry strategies to enhance teacher candidate dispositions*. Paper presented at the Annual Meeting of the Association for Teacher Educators (Jacksonville, Florida)
- Levin, J., & Nolan, J. (2010). *Principles of Classroom Management: A Professional Decision-making Model*. (6th ed.) Boston, MA: Pearson, Allyn Bacon, Inc.
- Lyons, C. A., & Pinnell, G. S. (2001). *Systems for change in literacy education: A guide to professional development*. Portsmouth, NH: Heinemann. Retrieved from <http://escholarship.bc.edu/education/tecplus/vol3/iss5/art2>

- National Council for the Accreditation of Teacher Education (NCATE). (2002). Professional Standards for the Accreditation of Schools, Colleges, and Departments of Education. Washington, D.C.
- Pennsylvania State Department of Education (2011). *Code of conduct*. Retrieved from http://www.portal.state.pa.us/portal/server.pt/community/guidelines%2C_policies%2C_complaint_forms%2C_reports_and_related_documents_/8850
- Nelson, M. (2002). *Identifying desirable pre service teacher dispositions: an intractable problem?* Paper presented at the Annual Meeting of the American Association of College for Teacher Education (54th, New York).
- Nortar, C.E., Riley, G. W., Taylor, P. W., Thornburg, R. A., & Cargil, R. L. (2009). *Dispositions: Ability and assessment*. Retrieved from www.macrothink.org/ije
- Raths, J. (2001). Teacher beliefs and teaching beliefs, 385-393. *ERIC Clearing House on Elementary and Early Childhood Education*. (ERIC Document Reproduction Service no ED452999.)
- Ros-Voseles, D., & Moss, L. 2007. The role of dispositions in the education of future teachers. *Young Children* 62 (5): 90-98.
- Tharp, G.& Gallimore, R. (1988). *Rousing minds to life*. Boston: MA Cambridge University Press.
- Yeh, Y. (2002). *Preservice teachers' thinking styles, dispositions, and changes in their teacher behaviors*. Paper presented at the 2002 International Conference on Computers in Education.

An Investigation into the Expansive-restrictive Nature of Teachers' Learning Situated in the Workplace

Dr. Eric J. Feeney

The past two decades have provided an expanding landscape of what educators believe to be qualities of effective professional development. Millions of teachers participate every year in some form of professional learning, such as workshops, study groups, mentoring experiences, and numerous other formal and informal learning experiences (Darling-Hammond, Wei, Andree, Richardson, & Orphanos, 2009). According to Guskey (2002), there are basically three major goals of professional development programs: (a) change in teachers' classroom practice; (b) change in teachers' attitudes, values, and beliefs; and (c) change in student learning outcomes. Effective professional development is active, social, and related to practice (Garet, Porter, Desimone, Birman, & Yoon, 2001). In light of this evidence, it is important to recognize that teachers' workplace learning is viewed as a significant component of the overall professional development of teachers (Hodkinson & Hodkinson, 2005; Retallick, 1999). The decontextualized, contrived, fragmented, and incoherent nature of traditional forms of professional development has helped provide the impetus behind generating new images of teacher learning (Ball & Cohen, 1999). Although, often times, workplace learning is not regarded as formal professional development per se, it has long been recognized by teachers as vital to their success in the classroom (Retallick, 1999). Workplace learning has features which may distinguish it from other traditional forms of professional learning, such as attending formal courses or conferences outside the school workplace (Retallick, 1999).

Purpose of Study

The purpose of this study was to examine teachers' professional learning situated in a school context in an effort to examine factors and conditions that both support and hinder how and what teachers learn in the workplace. The analysis included what teachers report about their perceptions of the extent to which they believe learning experiences and activities are actually taking place in their school, in comparison to the degree to which they say they value them. Although qualities, characteristics, and types of learning experiences are explored as part of what is effective at facilitating change and improving teachers' practice, there was a deeper fundamental question being examined. An important objective of this study was to move beyond the current focus in the literature of how best and what features or types of professional development activities to provide (Desimone, 2009), toward understanding more about the fundamental question of how teachers learn in a situated manner (Lave & Wenger, 1991; Webster-Wright, 2009). The significance of this study is predicated on the premise that teachers' working contexts are often also their contexts for learning (Meirink, Meijer, & Verloop, 2007).

In order to better understand teachers' experiences in the workplace, this study examined opportunities to learning on an 'expansive-restrictive continuum' (see Fuller & Unwin, 2006). The evidence from research that underpinned the development of the expansive-restrictive continuum

concluded that expansive rather than restrictive environments fostered learning at work (Fuller *et al.*, 2007), which ultimately would lead to teacher learning and change. The purpose is to better understand how improving teachers' workplace learning can be accomplished through an examination of the barriers and opportunities to learning confronted by teachers, (see Hodkinson & Hodkinson, 2005). Ultimately, the intent of this study was to provide evidence on forms of learning activities that appear to strengthen an expansive learning environment and those which contributed to a more restrictive learning environment (Fuller *et al.*, 2007; Hodkinson & Hodkinson, 2005).

Theoretical Framework

Situated workplace learning theory. Lave and Wenger (1991) offer a situated view of learning as a theoretical starting point for challenging the dominant theoretical perspective, which Beckett and Hager (2002) refer to as the standard paradigm. Situative theorists conceptualize learning as changes in participation in socially organized activities, and individuals' use of knowledge as an aspect of their participation in social practices (e.g., Wenger, 2003). A social perspective on learning, whatever form it may take, places it in the context of our day-to-day experiences. Billet (2004) considers participating in learning situated in the workplace important for key reasons. First, seeing learning as a consequence of participation in our work, rather than something privileged by participation in educational institutions or training events, may broaden our understanding of learning through work. An expansive nature of learning is cultivated when "an explicit focus on teacher learning, as a dimension of normal working practices" happens (Hodkinson & Hodkinson, 2005, p. 124). Within work environments, teachers, departments, and schools lay at various stages or degrees of all types of features, some consistently towards the expansive end while others more restrictive in degree (Hodkinson & Hodkinson, 2005).

Method

A quantitative research method utilizing a survey design approach was chosen to support answering the following two research questions:

- 1) What forms of learning activities strengthen an expansive learning environment?
- 2) How do these factors contribute to a more restrictive learning environment in the workplace?

Participants. There were 28 certified staff members in one elementary school who participated in the study. The participants in this study were teachers and the principal working in collaboration with a regional trainer in one elementary school (K-6) in a professional development program's region, which served as the case within a bounded system (Creswell, 2007). A vertical leadership team was comprised of the principal, a teacher representative from each grade-level, a regional trainer, and the researcher as a participant-observer. The team met monthly with the goal of designing a plan to support the school improvement plan, leading the implementation of professional development, and evaluating the professional development plan being implemented.

Data collection: Survey questionnaire. The staff questionnaire used in this study (with permission) was initially developed as part of high quality research from the Teaching and Learning Research Programme (TLRP), the United Kingdom's (UK) largest ever coordinated investment in educational inquiry (James *et al.*, 2006). The survey used in this study was comprised of 29 items (teachers' value and practice of professional learning). The items were divided into five different sections (A-E) related to the type of learning activity. These learning activity titles were used to reference specific survey items: A) Learning in relation to instructional practice, B) consulting different sources of knowledge, C) sharing collaborative activity, D) talking about and valuing learning, and E) exploring teacher's role in the learning process. For each item, participants were

asked to indicate the range on the scale from 1= very strongly disagree, 2= strongly disagree, 3= disagree, 4= agree, 5= strongly agree, and 6= very strongly agree that best described (a) the value of the degree of importance they placed on each learning activity; and (b) their perception of the extent to which each practice was happening or not happening in the school.

Data analysis. The value and practice percentages were calculated by adding the number of respondents who selected either 5 (strongly agree) or 6 (very strongly agree). After compiling the value and practice percentages a value-practice gap, representing the difference between the value and practice percentages reported, was calculated for each of the 29 items. The data were then placed on a continuum that consolidated a listing of the forms of learning activities in a four-column chart with the following category descriptors: (a) strong expansive, (b) supporting, (c) opposing, and (d) weak restrictive. A deeper analysis was completed to determine an optimal dissonance for teachers' learning (see Wheatley, 2002) based on the value, practice, and gap percentage ranges. Dissonance is represented by the gap between teachers' value beliefs and the extent to which learning practices are reported as actually happening in the school. This analysis was completed in an effort to extend and build upon the discussion concerning the *expansive-restrictive* nature of the different forms of learning activities and their influence on teachers' learning environment in the workplace. The dissonance for learning range was determined for the following three categories closely tied to the *expansive-restrictive* continuum:

- 1) Expansive- High value ($\geq 75.0\%$) – High practice ($\geq 40.0\%$)
Value/practice gap ($\geq 20.0\%$)
- 2) Restrictive with Opportunity- High value ($\geq 60.0\%$) – Low practice ($\leq 40.0\%$)
Value/practice gap ($\geq 25.0\%$)
- 3) Restrictive with Barriers- Low value ($\leq 50.0\%$) – Low practice ($\leq 30.0\%$) Value/practice gap ($\leq 24.99\%$)

Results

Forms of Learning Activities: Values and Practice

The item level data were of great interest because the question focused on particular forms of learning activities and revealed the difference in values and practice across categories of learning practices. When analyzing questionnaire results, the research sought to find patterns of similarity or difference that would be helpful in deciding where to focus resources in developing practice to strengthen an expansive learning environment in the school. An initial analysis yielded the following outcomes (see Appendix A for complete survey results):

- The smallest percentage of teachers attributed high value to professional learning practices that involved engagement through drawing on good practice from other schools (B2) and regularly observing each other in the classroom and providing feedback (C4).
- Values were noticeably high for reflecting on practice as a way of identifying learning needs (A3); experimenting with their practice as a conscious strategy for improving teaching and learning (A4); consulting student performance data to modify practice (B1); teachers as well as students learn at this school (D1); and staff offer one another reassurance and support (D6).
- Values-practice gaps and low levels of perceived reported practice were evident for relating what works in their practice to research findings (A1); consulting students about how they learn most effectively (B4); regularly collaborating, co-teaching, and making collective

agreements to test out new ideas (C3, C5, C6); discussing openly with colleagues what and how they are learning (D4); taking on a leadership role in making decisions about how to improve practice (E3); and teachers being consulted about how they learn most effectively (E4).

The survey items represent the forms of learning activities and give indication of the kinds of values-practice gaps that were found by aggregating the results from all participants. ‘Values’ were assessed by asking teachers how important they felt these practices to be for professional learning, and ‘practices’ were assessed by asking teachers the extent to which they believed the practice to be happening or not in the school. The values-practice gaps may provide some basis for comparison of responses within and among categories of learning practices and teachers, which may provide schools a starting point for better understanding the learning environment.

Expansive-Restrictive Dissonance for Learning

In this study, an optimal dissonance for teachers’ learning based on the value, practice, and gap percentage ranges was determined for teachers to open up the possibility for teacher learning to occur. The forms of learning activities associated with the *expansive-restrictive* continuum are presented in detail in Table 1. The learning activities highlighted are critical and are meant to deepen understanding and important discussion concerning the *expansive-restrictive* nature of teachers’ workplace learning.

Table 1

Dissonance for learning: expansive-restrictive

Expansive learning activities (High value-High practice): Gap \geq 20.0%

1. Staff reflect on their practice as a way of identifying professional learning needs.
 2. Staff experiment with their practice as a conscious strategy for improving learning and teaching.
 3. Teachers determine what and how they should learn for improving their practice.
 4. Teachers take on a leadership role in making decisions about how to improve their practice.
 5. Staff are able to see how practices that work in one context might be adapted to other contexts.
 6. Staff consult student performance data to modify their practice.
 7. Teachers attend workshops or inservice classes to further their learning.
 8. Staff offer one another reassurance and support.
-

Restrictive learning activities w/ opportunity (High value-Low practice): Gap \geq 25.0%

1. Staff modify their practice in the light of feedback from their students.
2. Teachers discuss openly with colleagues what and how they are learning.
3. Staff decides how to structure and use their time for improving their practice.
4. Staff modify their practice in the light of research-based evidence.

5. Teachers make collective agreements to test out new ideas.
-

Restrictive learning activities with barriers (Low value-Low practice): Gap \leq 24.99%

1. Staff draw on good practice from other schools as a means to further their own professional practice.
 2. Staff access online resources to support their learning.
 3. Staff regularly observe each other in the classroom and give each other feedback.
 4. Staff engage in co-teaching as a way of improving practice.
-

Discussion

This quantitative method survey design study provides evidence on the forms of learning activities that appear to strengthen an expansive learning environment and those which contribute to a more restrictive learning environment. Learning is always in motion and a part of everything we do. In the wider interest of creating more expansive learning environments, teachers need to be afforded opportunities to develop deeper understanding of the practice of teaching and learning beyond narrowly defined student learning goals (Hargreaves, 2005). Few studies have examined the relationship between the context and characteristics of workplace settings, the opportunities to learn they support, and the types of learning activities needed for teachers to do their work effectively.

Forms of Learning Activities

In extending the discussion, types of learning activities needed for teachers to do their work effectively added to the significance of the findings in this study. This included the significant differences between what learning activities were valued as important for teachers' learning and the extent to which these learning activities were reported as being practiced in the school. Striking among the differences between reported practices and values were low levels of values and even lower levels of perceived practices recorded for particular types of collaborative activity (i.e., joint research, co-teaching, peer observations). However, a general conclusion can be drawn that the learning environment in the school was positive and collaborative. In this study, the researcher has argued the importance of teacher learning situated in the context of the school as a necessary condition for promoting teacher learning and change. Differences between reported practices and values regarding modifying teachers' practice were also at low levels when considering feedback from students, research-based evidence, and evidence from evaluations. However, teachers reported consistently not only the value of staff as well as students learning in the school, but they also believed that it was happening at high levels even in light of student performance data that would suggest otherwise.

Dissonance for Teachers' Learning

One of the most promising findings with the potential of better understanding the interrelated combination of how teachers' beliefs, practices, and workplace factors influence change in this particular study is related to dissonance for learning. One particular area to attend to carefully involves what appears to be some inconsistency regarding learning activities that were highly

valued but not reported as being practiced at a high level; these may appear to be somewhat restrictive to learning. However, users should view these particular learning activities as restrictive but also providing opportunity to leverage expansive learning for teachers as attention is focused on the value/practice gap. This study adds to better understanding the complex relationship among beliefs, practice and the implications for teacher learning and change for improving practice.

Expansive learning activities with high-value and high-practice provide the most optimal dissonance for professional learning and opportunity for supporting teachers' learning. The implications for practice involve determining how to continue to support these practices to enhance workplace learning. As previously stated, another important finding is that not all learning activities are highly valued or reported as highly practiced. Some learning practices were highly valued by teachers, but not currently reported as being practiced at a high level. These should be considered as leverage points with potential opportunity to enhance teachers' workplace learning. The learning practices that have a low value or are reported as being practiced at inconsistent and low levels should carry a message for users that a deeper analysis of barriers preventing learning in these areas needs to be explored. The challenge becomes determining how the unique and personal nature of learning and context factors situated in the workplace interact with the learning activities teachers either choose to engage in or avoid all together.

Implications for Practice

Teachers. Teachers' learning situated in the workplace is important for key reasons. First, seeing learning as a consequence of participation in our work, rather than only something that happens in educational institutions or training events, may broaden our understanding of learning through work (Billet, 2004). According to Hodkinson and Hodkinson (2005), an expansive learning environment is cultivated when "an explicit focus on teacher learning, as a dimension of normal working practices" (p. 124) happens. As with previous studies (e.g., Billet, 2004; Felstead *et al.*, 2005), findings from this study revealed that teachers perceived learning through practice situated in the workplace as helpful for learning and improving practice. Teachers are confronted with a multitude of factors, regardless of where new learning occurs, that affect professional learning in the context of the workplace. Expansive learning activities with high-value and high-practice provide the most optimal dissonance for teachers' professional learning. These practices should continue to be supported to enhance workplace learning.

Professional development providers. Teacher learning is no longer seen as a one-time process of teacher training or as a process of periodic staff development workshops that provide the latest information about the most effective teaching processes and techniques (Cochran-Smith & Lytle, 1999). Learning in and from practice implies that improving teachers' practice "cannot be wholly equipped by some well-considered body of knowledge" (Ball & Cohen, 1999, p. 10). When professional development providers are considering teacher learning that improves practice, formal pedagogical knowledge of any sort would be difficult to measure or evaluate without having access to some direct link to observing teachers in action in the workplace (Fishman *et al.*, 2003). Teachers' beliefs and past experiences influence whether or not they engage in learning activities or avoid them altogether. It was evident in this study that although learning practices on the survey questionnaire were supported with broad-based research, teachers still placed low value and low practice levels on several learning activities.

The learning challenge for professional development providers is to consider how heavily context dependent teachers' learning is in relation to the interaction among beliefs, practices, and workplace factors. The features of what makes professional development effective (see Desimone,

2009; Garet *et al.*, 2001) are not intended to be a recipe-like framework, and cannot be delivered in a prepackaged form without consideration of the unique characteristics of individual teachers and the school itself. A significant component of professional learning must be situated in the workplace if the goal(s) of professional development are to change: (a) attitudes, values, and beliefs; (b) teachers' practice; and (c) student outcomes (see Guskey, 2002).

School administrators. The learning challenge for administrators is to acquire new ways of engaging teachers in the process of professional learning situated in the workplace. This learning challenge cannot be met by simply training individual practicing teachers through a standard approach to adopt some set of new skills that are treated as separate from the workplace context. In the midst of accountability pressure to be results-focused, it is important to also adhere to process-oriented learning. When a school adopts a different approach to teachers' professional learning, it often leads to contradictions and tension where some old element (e.g., top-down approach) collides with the new one (e.g., teacher-led). Naturally, this will create tension and what initially may appear to be resistance to change. Administrators must be mindful, confident and strategic in determining how to work within this tension in ways that will strengthen an expansive learning environment. Teachers engaged in authentic professional learning make sense of and understand the knowledge as it relates to their learning situated in the workplace. The findings of this study support a notion of teacher change that does not perceive change as a linear and sequential process. An important finding is that teacher learning and change in practice is complex and unable to be fully understood outside of teachers' day-to-day practice in the workplace.

About the Author

Dr. Feeney has several years of experience as both a trainer and a regional professional development director. His expertise is in the area of teacher leadership and professional learning in the workplace. Currently, Eric is a high school assistant principal at a Title I school in Reno, Nevada.

References

- Ball, D. L. & Cohen, D. K. (1999). Developing practice, developing practitioners: Toward a practice-based theory of professional education. In L. Darling-Hammond and G. Sykes (Eds.), *Teaching as the learning profession* (pp. 3-31). San Francisco, CA: Jossey-Bass.
- Beckett, D. & Hager, P. J. (2002). *Life, work, and learning: Practice in postmodernity*. New York: Routledge.
- Billet, S. (2004). Learning through work: Workplace participatory practices. In H. Rainbird, A. Fuller, & A. Munro (Eds.), *Workplace learning in context*, pp. 109-125. New York: Routledge.
- Cochran-Smith, M. & Lytle, S. L. (1999). Relationships of knowledge and practice: Teacher learning in communities. *Review of Research in Education*, 24, 249-305.
- Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches* (2nd Ed.). Thousand Oaks: Sage Publications.

- Darling-Hammond, L., Wei, R. C., Andree, A., Richardson, N., & Orphanos, S. (2009). Professional learning in the learning profession: A status report on teacher development in the United States and abroad. *National Staff Development Council; The School Redesign Network at Stanford University*.
- Desimone, L. (2009). Improving impact studies of teachers' professional development: toward Better conceptualizations and measures. *Educational Researcher*, 38(3), 181-199.
- Felstead, A., Fuller, A., Unwin, L. et al. (2005). Surveying the scene: learning metaphors, survey design and the workplace context. *Journal of Education and Work*, 18(4), 359-383.
- Fishman, B. J., Marx, R. W., Best, S., & Tal, R. T. (2003). Linking teacher and student learning to improve professional development in systemic reform. *Teaching and Teacher Education*, 19, 643-658.
- Fuller, A., Unwin, L., Felstead, A., Jewson, N. & Kakavelakis, K. (2007). Creating and using Knowledge: an analysis of the differentiated nature of workplace learning environments. *British Educational Research Journal*, 33(5), 743-759.
- Fuller, A. and Unwin, L. (2006) 'Expansive and Restrictive Learning Environments', in Evans, K., Hodkinson, P., Rainbird, H. and Unwin, L. (Eds) *Improving Workplace Learning*, London: Routledge.
- Garet, M. S., Porter, A. C., Desimone, L. Birman, B. F., & Yoon, K. S. (2001). What makes professional development effective? Results from a national sample of teachers. *American Educational Research Journal*, 38(4), 915-945.
- Guskey, T. (2002). Professional development and teacher change. *Teachers and Teaching: theory and practice*, 8(3/4), 381-391.
- Hargreaves, A. (2005). Educational change takes ages: Life, career and generational factors in teachers' emotional responses to educational change. *Teaching and Teacher Education*, 21, 967-983.
- Hodkinson, H. & Hodkinson, P. (2005). Improving schoolteachers' workplace learning. *Research Papers in Education*. 20(2), 109-131.
- James, M., Black, P., Carmichael, P., Conner, C., Dudley, P., Frost, D. et al. (2006). *Learning how to learn: Tools for schools*. Routledge, Taylor & Francis Group. London and NY.
- Lave, J. & Wenger, E. (1991). *Situated learning*. Cambridge: Cambridge University Press.
- Meirink, J. A., Meijer, P. C., & Verloop, N. (2007). A closer look at teachers' individual learning in collaborative settings. *Teachers and Teaching: Theory and Practice*, 13(2), 145-164.
- Retallick, J. (1999). Teachers' workplace learning: Towards legitimation and accreditation. *Teachers and Teaching: Theory and Practice*, 5(1), 33-50.

Webster-Wright, A. (2009). Reframing professional development through understanding authentic professional learning. *Review of Educational Research, 79*, 1-38.

Wenger, E. (2003). Communities of practice in social learning systems. In D. Nicolini, S. Gherardi, & D. Yanow (Eds.), *Learning in organizations* (pp. 76-99). Armonk, NY: M. E. Sharpe.

Wheatley, K. F. (2002). The potential benefits of teacher efficacy doubts for educational reform. *Teaching and Teacher Education, 18*, 5-22.

Appendix A: Survey results

Value – Practice Percentages

A) Learning in relation to instructional practice	Value %	Practice %	Gap %
1. Staff relates what works in their practice to research findings.	68.9	31.0	37.9
2. Staff are able to see how practices that work in one context might be adapted to other contexts.	75.9	44.8	31.1
3. Staff reflect on their practice as a way of identifying professional learning needs.	82.7	58.6	24.1
4. Staff experiment with their practice as a conscious strategy for improving teaching and learning.	86.2	55.2	31.0
5. Staff modify their practice in the light feedback from their students.	62.1	31.0	31.1
6. Staff modify their practice in the light of research-based evidence.	62.0	31.0	31.0
B) Consulting different sources of knowledge	Value %	Practice %	Gap %
1. Staff consult student performance data to modify their practice.	82.7	55.1	27.6
2. Staff draw on good practice from other schools as a means to further their own professional practice.	41.4	27.6	13.8

3. Staff consult professional resources for improving their practice.	58.6	27.6	31.0
4. Staff consult students about how they learn most effectively.	51.7	13.7	38.0
5. Teachers attend workshops or in-service classes to further their learning.	75.9	55.2	20.7
6. Staff access online resources to support their learning (e.g., web, webinars, videos)	48.2	27.5	20.7
C) <u>Sharing collaborative activity</u>	Value %	Practice %	Gap %
1. Staff modify their practice in light of evidence from evaluations of their classroom practice by administrators.	51.7	41.4	10.3
2. Staff carry out joint research with one or more colleagues as a way of improving their practice.	48.3	41.3	7.0
3. Staff regularly collaborate to plan their teaching.	65.5	44.8	20.7
4. Staff regularly observe each other in the classroom and give each other feedback.	34.4	24.1	10.3
5. Staff engage in co-teaching as a way of improving practice.	44.8	24.1	20.7
6. Teachers make collective agreements to test out new ideas.	62.0	41.4	20.6
D) <u>Talking about and valuing learning</u>	Value %	Practice %	Gap %
1. Staff as well as students learn in this school.	86.2	72.4	13.8
2. If staff have a problem with their teaching, they usually turn to colleagues for help.	68.9	58.6	10.3
3. Teachers suggest ideas or approaches for colleagues to try in class.	72.4	58.6	13.8
4. Teachers discuss openly with colleagues what how they are learning.	62.0	34.4	27.6 and
5. Staff frequently use informal opportunities to discuss how children learn.	65.5	55.1	10.4
6. Staff offer one another reassurance and support.	82.7	69.0	13.7
E) <u>Exploring teacher's role in the learning process</u>	Value %	Practice %	Gap %

1. Teachers determine what and how they should learn for improving their practice.	75.8	58.6	17.2
2. Staff decides how to structure and use their time for improving their practice.	62.1	31.0	31.1
3. Teachers take on a leadership role in making decisions about how to improve their practice.	75.9	41.3	34.6
4. Teachers are consulted about how they learn most effectively.	51.7	17.2	34.5
5. If an approach is not working, staff has the flexibility to change and reshape their professional learning plan.	72.4	48.3	24.1

Using Metacognitive Awareness of Fluency to Enhance Vocabulary

Dr. Teri Fowler and Dr. William Laird

Strong academic vocabulary is a vital component to the success of middle school readers. Vocabulary demands in content areas, as students progress into intermediate and middle school grades, increase at a rapid rate and influence the network of ideas that are important for conceptual learning in all disciplines (Hart & Risley, 1995). Allen (2006) reports students with strong academic vocabulary have a distinct advantage in textbook reading. It is essential to create awareness that the use of effective vocabulary instruction must be incorporated into content area instruction to aid in conceptual understanding as well as to build vocabulary (Hedrick, Harmon, & Linerode, 2004). Teachers need to focus on the enhancement of comprehension instead of promotion of word knowledge alone when considering effective vocabulary instruction. According to Goodman (2005) it is imperative that students are taught and practice language arts skills in *all* classes.

Findings from Research

Vocabulary refers to the kind of words that students must know to read increasingly demanding text with comprehension (Osborn, Lehr, & Hiebert, 2003). Fluency is defined in the Literacy Dictionary as “freedom from word recognition problems that might hinder comprehension” (Harris & Hodges, 1995, p. 85). Since fluent readers recognize words accurately and automatically, they can use cognitive energies to make connections with background knowledge and focus on the construction of meaning. Non-fluent readers have less cognitive energy and attention to devote to comprehension (National Reading Panel, 2000). Integrating fluency with vocabulary instruction can ensure automaticity, and in turn enhance comprehension.

Rasinski and Padak (2005) define fluency as the ability to decode words in text effortlessly or automatically so readers can reserve cognitive resources for the more important task of comprehending or making sense of the text. Fluency includes prosody, the ability to phrase written text into appropriate and meaningful chunks, which is reflected in readers’ use of expression, pausing, emphasis, and enthusiasm while reading orally.

Reading fluency is an important skill of effective readers (Hasbrouck, Innot, Rogers, 1999). Just because students have had initial exposure with fluency in their primary grades, they might not have mastered fluent reading (Rasinski & Padak, 2005). Reading fluency tends to be a necessary skill for comprehension (Kuhn & Stahl, 2003). Therefore, middle and secondary teachers should attempt to make reading fluency an integral component of their instruction regardless of their content area (Rasinski, Padak, McKeon, Wilfong, Friedauer, & Heim, 2005). Adding fluency instruction to the middle school is not only important for struggling readers, it is also helpful for all students as they encounter varied texts (Rasinski & Padak, 2005). Rasinski et al. (2005) state: “Students who lack sufficient fluency entering into the middle grades are not likely to find much instructional support for their difficulties. If fluency is a concern among middle and high school students, it needs to be taught” (p. 26). Middle school teachers can increase reading achievement and adolescent readers’ understanding of new vocabulary by teaching fluency in content classes.

Recommendations

Three recommendations for using metacognitive awareness of fluency as a means to increase understanding of vocabulary in middle school content area instruction are presented. The recommendations are designed to involve middle level students in metacognitive processes during instruction and assessment with a specific focus on learning new vocabulary. The first recommendation encourages middle level teachers to use fluency techniques in instructional practices and learning activities by conducting read-alouds, implementing repeated readings, and providing explicit instruction using techniques such as fluency phrases and chunking passages.

Read-Alouds

A read-aloud is one of the most effective ways for young adults to hear fluent reading (Allen, 2000). Fisher, Frey, and Williams (2002) advise teachers to read to students every day in every class for at least five minutes. Some teachers read text aloud while students listen; other teachers read the text aloud while students read along. Read-alouds introduce students to new and difficult vocabulary, provide scaffolds for pronunciations, generate interest in topics, and provide a vehicle for multiple exposures to new vocabulary. Text selections can be from content area textbooks or from other materials such as magazines, Internet sites, and newspapers that build students' background knowledge and expose students to the language of content. A science teacher whose class is studying Archimedes' principle might read aloud a newspaper article about the building and launching of a new cruise ship. A math teacher whose class is studying principles of accounting might project an Internet site on a large screen and read aloud about business ledgers from large companies involved in court cases.

Reading aloud to students has been found to be a significant way to increase vocabulary. However, research suggests that this reading should have some mediation involved for new words and should not be a dramatic performance (Dickinson & Smith, 1994). It may involve stopping to clarify, asking a question, or some response to promote active listening. For example, students may be asked to use the Thumbs Up procedure requiring students to put their thumbs up when they hear one of the new vocabulary words or any word related to the topic of study. Math students learning about the circumference of a circle might be asked to put thumbs up whenever the word circumference is read. This might be extended to all related words such as diameter, radius, etc.

Repeated Reading

Originally developed by Samuels (1979), the technique of repeated reading can be used by middle school teachers to enhance fluency and the acquisition of content knowledge. Repeated readings can be implemented using various procedures such as choral, partner, Cloze, computer-based, or audio-assisted readings, as well as oral and silent reading. In a choral reading all students in the group read out loud together, providing immediate feedback and support. A partner reading is a technique in which a proficient reader is paired with one who is less proficient. The proficient reader reads a passage of text out loud to model fluent reading and then the partner reads the same passage. After both have read orally, the partners take turns checking for comprehension. Using a Cloze procedure, teachers conduct a read-aloud stopping at key words to allow students the opportunity to fill in the missing words and then check for comprehension. In a computer-based reading students listen, read along, and record their own reading. Audio-assisted reading allows students to listen to audiotapes, point to text, subvocalize words, and read independently.

Effective rereading procedures provide students with many opportunities to practice reading, guidance in how fluent readers read, and feedback from peers, parents, or teachers to help them

become aware of and correct their mistakes (Foorman & Mehta, 2002; Shannahan, 2002). Evidence indicates that repeated oral reading with guidance and feedback helps to improve the reading ability of struggling readers at higher grade levels (National Reading Panel, 2000). As reading abilities improve, the ability to learn content through reading is enhanced. Rereading procedures capitalize on the reciprocal relationship between comprehension and fluency and provide a vehicle for multiple exposures to new vocabulary. A middle level social studies teacher helping students interpret a primary document might begin with a read-aloud asking students to follow along with the text, follow-up with a Cloze reading and a partner read, and end with a silent reading of the document.

Explicit Instruction

Modeling the language of content through read-alouds and implementing re-readings to ensure automaticity are both effective fluency techniques that can be used to facilitate the learning of new vocabulary in middle level content area classrooms. Providing explicit instruction in fluency through activities such as fluency phrases and chunking passages can further enhance this process.

Content area teachers are concerned with students using the language of content and learning to talk like a mathematician, artist, scientist, etc. Even though each word we read or speak has its own meaning, we generally do not read, speak, or think of each word individually. We group words together in phrases and use intonation, rhythm, and expression to enhance meaning. Certain phrases are even emphasized with pauses and increased volume to promote understanding. These aspects of fluency are important components of learning new vocabulary so that words become connected in concepts of thought and students become empowered to use new vocabulary in conversation and inner speech. A social studies teacher who reads aloud the amendments to the constitution, modeling appropriate phrasing and rhythm, makes it easier for students to read the amendments independently, think about them, and comprehend their meaning.

Understanding phrases while reading can help fluency and comprehension. When trying to read something new or complicated that does not seem to make sense, it is helpful for students to go back and read the passage one phrase at a time (Jones, 2004). Phrasing can be made easier for students by lightly underlining phrases and asking them to practice reading in phrases or underlining the phrases while they read. Underlined passages can be provided or students can underline during or after reading. As students underline, they actually read and reread to make sure the phrase markings are accurate, thus providing even more practice with vocabulary. Science students might underline phrases to enhance understanding of text discussing evaporation as follows: “During evaporation, a liquid changes to a gas gradually at temperatures below the boiling point” (McGlaughlin & Thompson, 1999, p. 224). Using slash marks to chunk passages into phrases is another way to encourage middle level readers to use fluency as a tool for comprehension. This process is highlighted in a technology course as students chunk a passage about editing and formatting multipage documents: “These tasks / become more challenging / in multipage documents, / because you cannot see / the whole document / on your screen / at once” (Pasewark, & Pasewark, 2002, p. 115).

Phrase generation using new and frequently encountered vocabulary is another fluency technique that promotes automaticity and helps students build connections between concepts. Science students studying the concept of density would each complete the following phrase: The density of _____. Each student completes a different sentence, making available a variety of sentences for fluency practice. Then through consensus building of the content of the sentences,

conceptual knowledge increases. Fluency isn't just reading fast; it is using one's voice to make or add to the meaning of the text (Rasinski & Padak, 2005). Content area teachers who teach phrasing and voice modulation through explicit instruction can empower middle level students to use their own voices to construct meaning of content area texts and thus increase their abilities to learn content through reading.

The second recommendation promotes teaching fluency concepts as vocabulary, embedding fluency language into content area instruction, and focusing on vocabulary fluency in course and team planning. Students must have an understanding of the concepts of fluency before they can make applications to enhance understanding of new vocabulary. When asked if she adjusted her rate for the difficulty of the text an adolescent reader responded, "What does that mean?" This question expressed by a proficient reader captures the urgency of teaching fluency to middle level readers. Students who are unaware of the components of fluency are unable to monitor implementation as they read new vocabulary. Teaching fluency as content and actually including fluency words in explicit vocabulary instruction in content classrooms are two ways middle level teachers can scaffold adolescent readers to use fluency to increase learning and improve understanding. Teaching words such as rate, accuracy, automaticity, prosody, phrasing, intonation, volume, etc. establishes a foundation for executing fluency as a bridge to comprehension.

Teachers can further support this foundation by embedding the language of fluency into instruction and assessment practices so that students become accustomed to the concepts and words. Fluency language can be embedded in direct instruction, highlighted during think-alouds, addressed in student conferences, and included in other activities throughout the course of instruction. During a think-aloud, a middle school music teacher modeling the importance of adjusting rate and volume as students are assigned to read a passage on Baroque composers containing the vocabulary words from the unit says, "I will adjust my reading rate and slow down when I come to the part of the text where the author discusses the characteristics of these composers and their music using the vocabulary words we discussed. Notice that my volume increases as I read the new words." While monitoring independent work, the music teacher directs a student to use fluency as a means to enhance understanding by saying, "I noticed you were unable to answer this question. How did you adjust your rate and volume when you read the paragraph containing this information about the Baroque composers?"

Teaching fluency concepts as vocabulary words and embedding the language of fluency in instructional practices scaffolds adolescent readers in the use of fluency to enhance comprehension. Embedding vocabulary fluency instruction throughout content instruction must become a focus for all middle level classes. When content area teachers construct lesson plans for the upcoming year, they should not only consider objectives specific to teaching content but should also encompass vocabulary fluency instruction. This recommendation can prove even more effective in team teaching situations. The team, working as a cohesive unit, can take a proactive approach in the planning process ensuring students receive content instruction and consistent vocabulary fluency instruction.

The third recommendation addresses cognition and metacognitive awareness of fluency and vocabulary in instruction and assessment. As middle level teachers use fluency techniques and embed fluency language into instruction, adjustments to assessments must follow. Since it is important to assess what is taught and learned, assessment practices must assess content area learning and also metacognitive awareness of fluency and vocabulary. Baker and Brown (1984) offer a general definition of metacognition as awareness and control of one's learning. A more detailed definition of metacognition is presented by Flavell (1979) as awareness of how one learns,

awareness of when one does and does not understand, ability to achieve a goal by using knowledge of how to use available information, ability to judge the cognitive demands of a certain task, knowledge of what strategies to use for what purposes, and assessment of a person’s progress both during and after performance.

It is unfortunate that metacognition is overlooked as a tool for learning in some secondary classrooms as teachers focus more on content and less on teaching strategies (Joseph, 2006). Reading comprehension instruction in many classrooms frequently focus on teacher-generated questions that measure comprehension of rather specific text material rather than developing metacognitive strategies for comprehending *all* text (Eilers & Pinkley, 2006). Teachers need to be reminded that the class time spent on metacognitive learning strategies in content classes does not take time away from the content; rather it provides opportunities for students to learn and practice techniques for mastering content (Roe, Stoodt-Hill, & Burns, 2004).

It is important for teachers to remember that metacognitive awareness can be taught (Joseph, 2006). There is sufficient research to suggest comprehension improves when metacognitive strategies for comprehending all text material are explicitly taught (Eilers & Pinkley, 2006). Reading performance can be improved using aspects of metacognition; therefore, teachers and administrators should pursue strategies that link these two areas (Eilers & Pinkley, 2006).

Content area teachers can promote students’ metacognitive awareness of fluency and vocabulary by including metacognitive assessments in classroom activities and routine progress monitoring. The Metacognitive Continuum for Vocabulary Fluency (MCVF), a metacognitive assessment developed by the authors, requires students to indicate level of awareness and control by drawing a vertical line on the continuum corresponding to the appropriate level. After using the assessment, students become so familiar with the form they can even create their own using notebook paper, post-it notes, or class journals.

The indicators not only empower students to monitor their own vocabulary learning, but also provide teachers with useful information for planning instruction. Students who indicate a high level of adjusted rate but a low level of understanding may need more background experiences with vocabulary or require additional rereading and fluency activities. Students who indicate a low level of adjusted rate could benefit from more intensive fluency instruction. Since readers adjust volume when reading new vocabulary, students who do not indicate this could be targeted for explicit instruction in adjustment of volume. Please see Table 1.

Table 1. Metacognitive Continuum

Metacognitive Continuum for Vocabulary Fluency

I adjusted my reading rate based on my purpose for reading.	I adjusted my reading rate for the difficulty of the text.	I read with accuracy.
Low 1 2 3 4 5 6 High	Low 1 2 3 4 5 6 High	Low 1 2 3 4 5 6 High
I read with expression.	I understood what I read.	I knew the vocabulary.
Low 1 2 3 4 5 6 High	Low 1 2 3 4 5 6 High	Low 1 2 3 4 5 6 High
	I adjusted volume for new vocabulary.	
	Low 1 2 3 4 5 6 High	

Conclusion

Content area reading must be addressed by all classroom teachers in order to equip middle school students with skills necessary to be academically successful. Vocabulary development by content area teachers cannot be left to chance (Greenwood, 2002). Joseph (2006) contends the complexity of reading material increases during the middle school years, a period when students should be developing and practicing the vital learning strategies necessary for success in high school, college, and in the workplace. Students who engage with words by hearing, using them, manipulating them semantically, and playing with them are more likely to learn and retain new vocabulary (Beck, McKeown, & Kucan, 2002). Using metacognitive awareness of fluency increases understanding and retention of new vocabulary and the likelihood of using vocabulary in new contexts. Middle level content area teachers can use metacognitive awareness of fluency by integrating fluency techniques in instructional practices and activities, embedding fluency vocabulary into instructional objectives, and using metacognitive assessments such as the MCVF.

About the Authors

Currently an Associate Professor of Education at Texas A&M University- Texarkana, Dr. Fowler has over thirty years of education experience including fourteen years as a K-12 teacher, ten years as a campus principal and district administrator, and eight years in higher education. Dr. Fowler has an active research agenda focusing on the relationship between language and thought, visualization, and test-taking strategies.

Dr. William Laird is also an Associate Professor of Education at Texas A&M University- Texarkana. He has eleven years public school secondary teaching experience, four years as a K-12 principal, and sixteen years as a teacher educator. Dr. Laird has an active research agenda that includes improving instructional effectiveness and student success, and increasing teacher education student success on standardized teacher certification examinations.

References

- Allen, J. (2006) Too little or too much? What do we know about making vocabulary instruction meaningful? *Voices from the Middle*, 13(4), 16-19.
- Allen, J. (2000). *Yellow brick roads: Shared and guided paths to independent reading*, 4-12. Portland, ME: Stenhouse.
- Baker, L. & Brown, A. L. (1984). Metacognitive skills and reading. In P. D. Pearson, R. Barr, J.L. Kamil and Rosenthal, eds., *Handbook of Reading Research*, New York: Longman Press.
- Beck, I. L., McKeown, M. G., & Kucan, L. (2002). *Bringing words to life: Robust vocabulary instruction*. New York: Guilford.

- Bryant, D. P., Ugel, N., Thompson, S., & Hamff, A. (1999). Instructional strategies for content-area reading instruction. *Intervention in School and Clinic, 34*(5), 293-302.
- Dickinson, D. K., & Smith, M. W. (1994). Long-term effects of preschool teachers' book reading on low-income children's vocabulary and story comprehension. *Reading Research Quarterly, 29*, 104-122.
- Eilers, L. H., & Pinkley, C. (2006) Metacognitive strategies help students to all text. *Reading Improvement, 43*(1), 13-29.
- Fisher, D., Frey, N., & Williams, D. (2002). Seven literacy strategies that work. *Educational Leadership 60*(3), 70-3.
- Flavell, J. H. (1979) Metacognition and cognitive monitoring: A new area of cognitive-development inquiry. *American Psychologist, 34*(10), 906-911.
- Goodman, A. (December 2005) The Middle School High Five: Strategies can triumph. *Voices from the Middle, 13*(2), 12-19.
- Foorman, B. R., & Mehta, P. (2002, November) *Definitions of fluency: Conceptual and methodological challenges*. PowerPoint presentation at www.prel.org/programs/fluency/Foorman.ppt
- Greenwood, Scott C. (2002) Making words matter: vocabulary study in the content areas. *The Clearing House, 75*(5), 258-263.
- Harris, T. L., & Hodges, R. E. (1995). *The literacy dictionary*. Newark, DE: International Reading Association.
- Hart, B., & Risley, T.R. (1995). Meaningful differences in everyday experience of young American children. Baltimore: Paul H. Brookes.
- Hasbrouck, J. E., Innot, C., & Rogers, G. H. (1999) "Reading Naturally": A strategy to increase oral reading fluency. *Reading Research and Instruction, 39*(1), 27-37.
- Hedrick W. B., Harmon, J. M., & Linerode, P. M. (2004) Teachers' beliefs and practices of vocabulary instruction with social studies textbooks in grades 4-8. *Reading Horizons, 45*(2), 103-125.
- Jones, S. (2004). *Resource Room: Learning about phrases to improve fluency and comprehension*. Retrieved October 18, 2006 from <http://www.resourceroom.net>
- Joseph, N. (2006) Strategies for success: Teaching metacognitive skills to adolescent learners. *The New England Reading Association Journal, 42*(1), 33-39.
- Kuhn, M. R., & Stahl, S. A. (2003). Fluency: A review of developmental and remedial

- practices. *Journal of Educational Psychology*, 95, 3-21.
- McLaughlin, C.W., & Thompson, M. (1999). *Glencoe physical science*. New York: Glencoe/McGraw-Hill, p.224.
- National Reading Panel. (2000). *Report of the National Reading Panel: Teaching children to read*. Bethesda, MD: National Institute of Child Health and Human Development.
- Osborn, J., Lehr, F., & Hiebert, E. (2003). *A focus on fluency*. (PREL Rep. No. ESO303). Honolulu, Pacific Resources for Education and Learning.
- Pasewark, W. R., & Pasewark, D. (2002). *Microsoft Office XP*. United States: Thomson Learning, p.115.
- Rasinski, T., & Padak, N. D., (2005) Fluency beyond the primary grades: Helping adolescent struggling readers. *Voices from the Middle*, 13, 34-41.
- Rasinski, T. V., Padak, N. D., McKeon, C. A., Wilfong, J. A., Frieddauer, J. A., & Heim, P. (2005) Is reading fluency a key for successful high school reading? *Journal of Adolescent & Adult Literacy*, 49(1), 22-27.
- Roe, B., Stoodt-Hill, B., & Burns, P. (2004). *Secondary School Literacy Instruction: The Content Areas*. Boston: Houghton Mifflin.
- Samuels, S. J. (1979). The method of repeated readings. *The Reading Teacher*, 32, 403-408.
- Shanahan, T. (2002, November). A sin of the second kind: The neglect of fluency instruction and what we can do about it. PowerPoint presentation at A Focus on Fluency Forum, San Francisco, CA. Retrieved from: www.prel.org/programs/rel/fluency/Shanahan.ppt

Culturally Responsive Teaching: Increasing Involvement of Minority Students and Parents

Ms. Angela Piña

In the United States, the demographics are changing. The majority of the population remains Anglo, at 66.4% of the nation. Hispanics only represent 14.8% of the population, and African Americans represent 12.3% of the population. Texas is different because Hispanics account for 32% of the total population. Anglos account for 48.3% of the population, and 11.4% are African American (Combs, 2010).

In Texas Education Agency's Region 18, the demographics change significantly. Hispanics number at 64.8%. African Americans account for 4.7% of the population, while Anglos are at 28.2%. The total percentage for minorities is 71.8%. However, the percentage of minority teachers is at 43.5%. The number is disheartening because there are not enough teachers that *look like* their students. This is especially disturbing when one sees that 54.7% of the students are economically disadvantaged, and 10.7% are limited English proficient (Texas Education Agency, 2012). This paper explores theories regarding minority education and outlines a plan for addressing minority issues.

Theories Regarding Minority Education

Lisa Delpit

Lisa Delpit believes that many minority students do not achieve academic success because they are held back by society's bias against minorities; they assume that color equals inferiority. One way to combat this is to have a Constitutional amendment that will guarantee all students equal education. There needs to be robust, locally- based content; teaching must be culturally responsive, and there must be a sincere relationship between teachers and students. Delpit believes that with a Constitutional amendment, teachers can build a curriculum that is not based on test performance (Delpit, 2012).

Since an amendment is not feasible, Delpit has three facts that teachers should keep in mind. First they need to be courageous and advocate for these students who are in a minority group, and from whom little is expected. Second, teachers need to learn with a sense of humility. They cannot assume that they know all of the answers. Third, Delpit wants teachers to learn that they should make an effort to include marginalized groups, and adds that teachers should not see members of minority cultures as deficient. Rather, they should insist that attention be given to that culture (Delpit, 2012).

One of the reasons that minority cultures are considered deficient is due to their discourse patterns. The dominant culture tends to be straightforward, getting to the point right away, while minority discourses tend to be more social, where the speaker eventually gets to the point. Delpit admits that there is a lot of disagreement as to whether or not the dominant culture discourse patterns should be taught, but that at minimum, the dominant discourse's *superficial features* should be taught. The researcher goes on to explain that most people have multiple discourses, such as the

one at home versus the one at church, and that students can learn the dominant discourse in order to be successful in an academic setting (Delpit, 1992).

Another thing that Delpit suggests is that teachers change the “classroom ecology”. The use of the term ‘classroom ecology’ is more accurate than classroom management because students should learn to self-govern so that they will know how to make better decisions. In addition, students should feel that their classroom is more like a family where the members work together to achieve goals, and care for each other as necessary (Delpit & White-Bradley, 2003). Some of the behaviors suggested by Delpit and White-Bradley tend to line up with the minority cultures’ familial discourse, so students feel more comfortable.

Finally, Delpit shares some lessons for teachers so that minority cultures will no longer be seen as inferior. First, teachers should teach more robust content, ensuring that all students have access to the majority of conventions essential to success. Next, teachers should demand that students participate in critical thinking so that they can learn how to discern what is best for them. Teachers should use the children’s experiences to connect the familiar with the unknown. When they do this, teachers can form a connection between the child’s culture and school. Teachers are still expected to monitor progress, and address needs through intervention strategies that work. These, combined with the sense of family, will enable minority students to be successful (Delpit, 2006).

Sonia Nieto

Sonia Nieto believes in a culturally responsive pedagogy, but she prefers the term “race and ethnicity responsive” pedagogy (Hawley & Nieto, 2010). That is, teachers should use a student’s culture and history to encourage learning. The warning, however, is that teachers sometimes misuse culturally responsible pedagogy as a bandage to cover up the problem (Nieto, 2002). For instance, teachers may allow students to make a piñata without presenting the culture or the reasons behind the use of a piñata. This can actually further marginalize minority cultures because their beliefs are reduced to an art project. As a result, teachers need to be aware that their good intentions can further damage the relationship between school and the minority culture. Nieto goes on to suggest that focusing on culture and ethnic identity is not enough to improve these relationships (Nieto, 2002).

She believes teachers should ask the *hard* questions. The first has to do with whether or not minorities are enrolled in courses that are academically challenging. Second, how are language minority students treated? Are they marginalized? Third, what is the experience level of the teachers who are working with minority students? Nieto states that a need exists to evaluate fiscal allocations for minority students. Ultimately, people in positions of authority need to ask questions about access, fair play, and equality for minority students (Nieto, 2002). The people in power then need to answer the questions with results that help not only minorities, but all other marginalized populations.

Much of Nieto’s work focuses on teachers and the role they play in educating minority students. First, teachers have to know themselves. They should know about their beliefs, values, biases, strengths, and weaknesses (Nieto, 2012). Along this line, Nieto suggests that teachers who are self-aware are often involved in activities that promote social justice, and this keeps them involved in teaching (Nieto, 2003). In fact, many great teachers who continue to teach become angry at how students have to endure such injustices as racism and poverty (Nieto, 2003). Nieto adds that “anger is the other side of hope”, (Nieto, 2003, p. 17), meaning that great teachers have the ability to turn their anger into hope because they are active in promoting social justice. They

strive to change the status quo to create an equitable educational environment for their students. Some teachers advocate locally, while others advocate at the state or national level.

Next, teachers need to learn about the students in their charge (Nieto, 2012). Nieto goes on to explain that teachers should have trust, faith, and confidence in their students' strengths (Nieto, 2003). When schools hire teachers of color, not only do minority students improve, but the scores of Anglo students improve even more than those of the minority students (Nieto, 2005). These teachers should understand how learning and teaching are affected by race and ethnicity. Teachers inherently know that their assumptions affect how much students can learn (Hawley & Nieto, 2010). This gives teachers and students a sense of hope in the possibility of what can be (Nieto, 2003).

Third, teachers need to develop a collaborative community of allies who will be supportive in their endeavors (Nieto, 2012). In building a collaborative community, teachers can improve their knowledge, shape the future of the students, and provide support to one another (Nieto, 2003). This will influence teachers who have a shared belief that they have a responsibility to positively impact students' learning, regardless of their culture or ethnicity. This does not mean that teachers should be *color blind*. This practice only serves to alienate students because it negates the importance of a person's race or ethnicity. Teachers need to be aware of cultural practices and utilize them in the classroom as much as is possible. They also need to be aware that a student's inability to perform at equal levels of their peers is not always biological- it is usually due to differences in culture and poverty (Hawley & Nieto, 2010).

Teachers still need to fulfill the promise of an equitable education that so many students demand (Nieto, 2003). Equitable instruction should increase, rather than decrease, academic rigor. They need to make sure that students are prepared for more academically challenging courses in both high school and college. They need to break the stereotype that only White people can go to college, and that a person is not denying his or her culture by choosing to attend college. As teachers advocate for their students, they safeguard the democratic process for them, and help to protect their civil rights.

Ana Maria Villegas

Ana Maria Villegas takes culturally responsive teaching seriously because she came from a cultural background similar to students considered to be *disenfranchised*. Villegas believes, as do Delpit (1992) and Nieto (Hawley & Nieto, 2010), that teachers should be trained to be more culturally and linguistically responsive, and she has several suggestions for doing this. First, universities, region centers, and districts should train teachers specifically in areas of linguistic development. If teachers know how to work with English language learners (ELLs), then the students will be more likely to learn (Lucas, Villegas, Freedson-Gonzalez, 2008).

During their training, teachers must understand how language develops, and learn ways to expand language development in the classroom. Teachers need to know some basic information about ELLs. They need to know that students learning a new language develop at a much slower pace than their native English speaking peers. Second, teachers need to know that ELLs need comprehensive input at a level that is only slightly higher than their language ability. Third, teachers need to understand the difference between basic interpersonal communication skills (BICS) and cognitive academic language proficiency (CALP) (Lucas, Villegas, Freedson-Gonzalez, 2008). BICS develops much faster for ELLs because this is the social language that they use. CALP develops more slowly because it is the language used only in an academic setting (Cummins, 1999-2003).

Teachers need to learn that students with strong language development in their native tongue will achieve parity with their English speaking peers much faster than those who do not have adequate language development in their native tongue. This is why there is a push for ELL students to remain in bilingual classes for a longer period of time. Students have to feel welcome and accepted in their classroom environment so that they will feel comfortable practicing their new language skills. Finally, teachers need to learn to pay special attention to how language is formed and how it functions (Lucas, Villegas, Freedson-Gonzalez, 2008).

Another way to promote culturally responsive teaching is to recruit and hire teachers who have diverse backgrounds. There are two reasons for this. First, teachers can serve as positive role models for students of color. Many of these students come from homes where parents work in low education jobs, so they don't have any professionals to emulate. Anglo students can also see that stereotypes that have been promulgated through the centuries are not necessarily true. The second reason there should be a more diverse teaching community is that teachers of color are in the unique position of teaching students of similar backgrounds. This doesn't mean that Anglo teachers cannot be taught these skills. It just means that teachers of color are already ahead of their peers in that respect (Villegas, Strom, & Lucas, 2012).

Villegas goes on to suggest that potential teachers who are racially diverse be identified and groomed in high school, and in some instances as early as middle school. These students can then do internships at various campuses within the district. This will provide students of color with an opportunity to learn about teaching. In addition, school districts need to make a concerted effort to actively recruit and hire students from colleges, (Villegas, Strom, & Lucas, 2012). Districts can also offer stipends for paraprofessionals who are already working for the district to go back to school (Villegas, & Clewell, 1998).

Colleges and universities also have to change their curricula to include classes that teach about culture, race, and ethnicity. Villegas adds that, while the ideal is a teacher who *looks like* the minority students, Anglos can be taught cultural sensitivity, (Zeicher, Grant, Gay, Gillette, Valli, & Villegas, 1998). This means that institutions of higher learning need to change their missions, policies, and procedures so that they reflect a desire and commitment to diversity. Admission procedures into teacher preparation programs should also reflect commitment to diversity by considering multicultural criteria in addition to the more traditional academic criteria (Zeicher, et al., 1998).

Finally, the theory of social justice should permeate all institutions of learning. Villegas argues that schools should focus on social justice because it serves a purpose in the future of all children. If schools are going to provide knowledge and skills then they must also assure that *all* students get an equitable education. In addition, teachers should not come in with an attitude that some students are better than others because of socioeconomic status, color, or culture. All students should be given equal opportunity to learn, even if it means differentiating instruction for all students in the class. In other words, teachers need to be held to a higher standard because they not only serve as role models, but they also serve as agents of change (Villegas, 2007).

Recommendations

This researcher has formulated a suggested action plan based upon the above research. An examination of the articles by Delpit, Villegas, Nieto, and other researchers suggests that the following efforts will increase participation by all stakeholders involved, (Nieto, 2003; Hawley & Nieto, 2010; Delpit, 2006; Delpit & White- Bradley, 2003; Delpit, 2006).

- Districts should make efforts to increase the number of teachers of color (Villegas, Strom, & Lucas, 2012), through region service centers, universities, and high schools. This should be a priority for them. They should assure that a collaborative community is being built and that they strive to break the stereotype that only “Whites” go to college. To begin recruiting from among their own student population, districts should increase the academic rigor by offering challenging courses and making a conscious effort to include minorities in the classes. To that end, districts should also improve their bilingual programs to assure that students remain as long as possible, rather than exiting them early. Petitioning the state government to change regulations regarding exit criteria for bilingual programs so that students are not forced to exit a program they clearly need in order to achieve parity with their English speaking peers is necessary.
- Districts should train teachers in culturally responsive teaching (CRT) (Nieto, 2003; Hawley & Nieto, 2010; Delpit, 2006; Delpit & White-Bradley, 2003; Lucas, Villegas, Freedson-Gonzalez, 2008). Districts should assure that there is culturally responsive professional development for all teachers. This will cover culture, language development, parental involvement, teaching styles, forming connections between a student’s culture and school, teaching more robust content, improving classroom ecology, and challenging societal views. To assure that teachers are implementing CRT, walk-throughs and observations should be conducted by principals, region centers, and experienced staff. If teachers are struggling with implementation, campus leadership should provide consultations through region centers and from experienced staff.
- Districts should strive to improve parental involvement, particularly among minorities, (Taylor, Bernhard, Garg, & Cummins, 2008; Young, Austin, & Growe, 2013; LaRocque, Kleiman, & Darling, 2011). A few examples would include inviting parents to various functions. Staff should assure that invitations are in multiple languages, and in multiple media. Announcements should be posted in multiple languages at the grocery store, churches, and in the newspaper, and cards should be mailed home. Campuses should update the parent involvement plan by inviting parents to attend an informational meeting and soliciting input about their wants, needs, and expectations. There should be an administrator who speaks in at least two languages so that parents will feel welcome. If this is not an option, a qualified translator should be available for parents.
- Once the parental involvement plan is written and approved, campus staff should begin recruiting volunteers with a focus on including minority parents. Teachers can recommend to the principal those parents who have been identified as marginally participating in their children’s education and actively recruit them. The principal can send letters, make phone calls, and greet parents as they arrive. If the campus administrator does not speak a second language, then qualified staff should be available to translate, but the primary responsibility should fall to the principal.
- In an effort to keep parents involved, the principal or assistant principal should have breakfast or dinner with parents once per month so that parents address any issues or concerns they have. To further the efforts to involve parents, teachers should be trained in ways to include parents in the education of their children (Nieto, 2003; Hawley & Nieto, 2010; Delpit, 2006; Delpit & White-Bradley, 2003; Lucas, Villegas, Freedson-Gonzalez, 2008). They should be highly visible by walking students out each day, greeting students each morning, sending weekly progress notes home, and making phone calls when they don’t see or hear from parents each month. Teachers should also increase the number of

real world activities that involve parents. Some examples include Constitution Day/ 16 de Septiembre, Emergency Responders day, Thanksgiving dinner, Las Posadas/ Kwanzaa/ Hanukah, and Black History Fair.

- Individual campuses should provide evening opportunities for the parents and students. These opportunities should focus on the core subjects: reading, math, science, and social studies. In addition, campus staff should offer opportunities for students to attend an end of year BBQ, STAAR camp, and cooking class. The goal to keep in mind is that parents should be involved, and cultures should be honored.
-

Conclusion

School districts should plan on long-term implementation, and should make attempts to increase the number of minority teachers each year by utilizing region centers and local universities to identify qualified candidates. This means that universities and region centers also need to demonstrate a commitment to enhancing diversity not only in its classrooms, but also in the graduates they send to districts. If necessary, school districts may wish to offer sign on bonuses for all qualified candidates.

Districts should strive to increase parental involvement. Work on the parent involvement plan should begin upon onset of the current school year, and should be updated each year thereafter. Recruitment of parents should be ongoing, and should be the responsibility of all staff. If the academic community resolves to employ best practices related to culturally responsive teaching, and insists on social justice for all, not only will minority students blossom, but the school culture and climate will be enriched for all students.

About the Author

Ms. Angela Piña is a 3rd Grade bilingual teacher in Monahans, TX. She will graduated with a Master's in Educational Administration from Angelo State University in December 2013.

References

- Combs, S. (2010). Texas in focus: A statewide view of opportunities. *Demographics*. Retrieved from <http://www.window.state.tx.us/specialrpt/tif/population.html>.
- Cummins, J. (1999- 2003). Cognitive theories of bilingual education. Retrieved from <http://iteachilearn.org/uh/guadarrama/sociopsycho/cogeng.htm>.
- Delpit, L. (1992). Acquisitions of literate discourse: Bowing before the master? *Theory Into Practice*, 31(4), 296. Retrieved from Academic Search Complete database.
- Delpit, L. (2006). Lessons from teachers. *Journal Of Teacher Education*, 57(3), 220-231. doi:10.1177/0022487105285966
- Delpit, L. (2012). 'Will it help the sheep?': Why educate?. *About Campus*, 17(3), 2-9. doi:10.1002/abc.21080

- Delpit, L., & White-Bradley, P. (2003). Educating or imprisoning the spirit: Lessons from ancient Egypt. *Theory Into Practice*, 42(4), 283-288. Retrieved from Academic Search Complete database.
- Hawley, W. D., & Nieto, S. (2010). Another inconvenient truth: Race and ethnicity matter. *Educational Leadership*, 68(3), 66-71. Retrieved from Academic Search Complete database.
- LaRocque, M., Kleiman, I., & Darling, S. M. (2011). Parental involvement: The missing link in school achievement. *Preventing School Failure*, 55(3), 115-122. doi:10.1080/10459880903472876.
- Lucas, T., Villegas, A., & Freedson-Gonzalez, M. (2008). Linguistically Responsive Teacher Education: Preparing Classroom Teachers to Teach English Language Learners. *Journal Of Teacher Education*, 59(4), 361-373. Retrieved from Academic Search Complete database.
- Meyer, R. (2011). Quality education as a Constitutional right: Creating a grassroots movement to transform public schools. *Encounter*, 24(2), 54-57. Retrieved from Academic Search Complete database.
- Nieto, S. M. (2002). Profoundly multicultural questions. *Educational Leadership*, 60(4), 6. Retrieved from Academic Search Complete database.
- Nieto, S. (2003). What Keeps Teachers Going?. *Educational Leadership*, 60(8), 14. Retrieved from Academic Search Complete database.
- Nieto, S. (2005). Social justice in hard times: Celebrating the vision of Dr. Martin Luther King, Jr. *Multicultural Perspectives*, 7(1), 3-7. doi:10.1207/s15327892mcp0701_2.
- Nieto, S. (2012). Teaching, caring, and transformation. *Knowledge Quest*, 40(5), 28-31. Retrieved from Academic Search Complete database.
- Taylor, L. K., Bernhard, J. K., Garg, S., & Cummins, J. (2008). Affirming plural belonging: Building on students' family-based cultural and linguistic capital through multiliteracies pedagogy. *Journal Of Early Childhood Literacy*, 8(3), 269-294. doi:10.1177/1468798408096481
- Texas Education Agency. (2012). Academic excellence indicator system; 2011-2012 Region 18 performance report. Retrieved from <http://ritter.tea.state.tx.us/cgi/sas/broker>.
- Villegas, A. (2007). Dispositions in teacher education: A look at social justice. *Journal Of Teacher Education*, 58(5), 370-380. Retrieved from Academic Search Complete database.
- Villegas, A., & Clewell, B. (1998). Increasing Teacher Diversity by tapping the paraprofessional

pool. *Theory Into Practice*, 37(2), 121. Retrieved from Academic Search Complete database.

Villegas, A., Strom, K., & Lucas, T. (2012). Closing the Racial/Ethnic Gap Between Students of Color and Their Teachers: An Elusive Goal. *Equity & Excellence In Education*, 45(2), 283-301. doi:10.1080/10665684.2012.656541.

Young, C. Y., Austin, S. M., & Growe, R. (2013). Defining parental involvement: Perception of school administrators. *Education*, 133(3), 291-297. Retrieved from Academic Search Database.

Zeicher, K., Grant, C., Gay, G., Gillette, M., Valli, L., & Villegas, A. (1998). A research informed vision of good practice in multicultural teacher education: Design principles. *Theory Into Practice*, 37(2), 163. Retrieved from Academic Search Complete database.

Teacher Candidates' Perceptions of Special Education

Dr. S. Nina Saha-Gupta, Dr. Margarita Lara, and Mr. Jeffrey House

Teacher shortage is one of the most critical factors facing school districts around the nation. This is particularly true of some high need areas. This shortage has been compounded by the requirements of the *No Child Left Behind Act of 2001* which mandates that teachers be certified in their respective disciplines and meet the *highly qualified* requirement. "Educational experts predict that the major shortages will be in the areas of math, science, bilingual education, English as a Second Language and special education" (American Association for Employment in Education, 2008). Some reasons cited for the teacher shortage include certification requirements, inadequate pay, increasing class sizes, teacher burnout, teacher attrition and an aging workforce. Given the current economic conditions nationwide, and the ensuing budget cuts faced by school districts across the nation, schools will have to contend with larger class sizes and fewer teachers. Unfortunately, while schools districts may be forced to reduce their teaching workforce, students will continue to populate the schools. Furthermore, the need for special education teachers will increase phenomenally by the year 2018 (17% increase from 2008) due to improvements made in diagnosing different disabilities and the number of children who will therefore require services (U.S. Bureau of Labor Statistics, May 2009). These projections include the need for special education teachers from preschool through secondary education.

Research has documented the increasing rates of teacher attrition and teacher shortage in special education (Boe, Cook & Sunderland, 2008; Brownell, et al., 1997; Nichols, Bicard, Bicard & Casey, 2008; Zabel & Zabel, 2001). As reported by Provost (2009), nine of the 13 educational fields identified by the American Association for Employment in Education (2008) are in special education. A survey of the research indicates that teacher attrition among special education teachers is far higher than that among general education teachers (Ingersoll & Smith, 2004). Studies indicate that some of the most cited reasons for teachers leaving special education are lack of administrative support, discipline problems, high case loads, lack of resources and excessive paperwork (Brownell, et al., 1997). Some studies have also explored the differences among personal qualities of teachers that may impact their leaving or staying in the field. While Billingsley, Carlson and Klein (2004) reported that commitment to teaching among both general and special educators had an impact on their decision to continue teaching, Brownwell, et al. (1995) reported that an increased sense of teaching efficacy may contribute to top teachers staying in the profession. Interestingly, some studies reported that attrition rates for special education teachers varied according to the disabilities of their students. For instance, Kaff (2004) cites studies that found higher rates of attrition for teachers of students with emotional disorders as compared to teachers of students with learning disabilities or mental retardation.

Compounding the problem of teacher attrition in special education, and the nationwide shortage of special education teachers, is the increasing number of students being identified for special education (DeMik, 2008). Therefore, it is of critical importance for school districts to be able to effectively serve this growing population of special education students. School leaders and administrators have to do their part in retaining the first year special education teachers. Research from Eisner (2006) reported that many new teachers enter the field seeking satisfaction in teaching,

but according to Billingsley (2004), many special educators do not transition from a hopeful beginner to a highly qualified experienced teacher.

The purpose of this paper is to explore the perceptions of pre-service general and special education teacher candidates regarding special education. The authors of this article were interested in studying how the field of special education is perceived by those intending to become teachers. The authors chose to focus on pre-service teacher candidates primarily for two reasons: (1) most of the research on teacher retention and attrition has focused on the in-service experiences of special education teachers, and (2) beginning special education teachers are the ones who may help to reduce the teacher shortage. Study participants included a total of one hundred and three (103) teacher candidates, of whom eighty-six (86) were general education teacher candidates and seventeen (17) were special education teacher candidates. Participants were asked to complete an open-ended survey questionnaire regarding their perceptions of special education and reasons why they may or may not consider seeking special education certification.

Candidates seeking certification in special education were required to respond to a different set of questions primarily focusing on the reasons for their selection of special education teaching as a career and their perceptions of the job of a special education teacher. It is the authors' position that it is important for teacher educators to explore candidate perspectives about teaching, and since students with disabilities are now more likely to be served in general education classrooms, it was important to include both general and special education teacher candidates. As professionals entrusted with preparing teachers, it is important to gain a basic understanding of the beliefs and attitudes that drive pre-service teacher candidates.

Literature Review

A review of literature reveals the importance of teacher beliefs as originating from personal and social experiences and encounters, family traditions, community participation, literature, teacher preparation, professional development etc. (Lortie, 1975). While beliefs are regarded as being similar to attitudes, as Davis and Andrzejewski (2009) point out, the most important aspect is that beliefs tend to influence behaviors and help teachers make meaning of their role or the perceived roles of other teachers. They also state that beliefs serve as a foundation for setting goals, and that teachers interpret unfamiliar situations through the lens of their belief systems.

One of the many aspects that seem to impact teacher candidates' perception of the work of a special education teacher has to do with the ways in which the special educator's role has changed with new legislation and amendments to existing laws (IDEIA 2004). Special education teachers have gradually moved out of their own special classrooms, as more students with disabilities are being served in the general education classrooms (Martin, 2010). As collaborators with general education teachers, the role of a special education teacher now extends beyond teaching to assessing student needs, identifying and developing adaptations and modifications, developing individualized educational plans (IEPs), developing and implementing behavior intervention plans, working with paraprofessionals, and a whole host of other "non-teaching" duties. According to Billingsley (2004), many special education teachers experience difficulty and frustration in carrying out these different roles, and the challenge is further compounded by lack of administrative and collegial support and lack of resources. Size (2009) reported that, while teachers supported the rights of students with disabilities to be educated in the general education classrooms, only a third of the teachers felt that they had the time, preparation, resources and skills to effectively teach students with disabilities. Similarly, Engelbrecht, Oswald, Swart and Eloff (2003) report that if general education teachers feel negatively towards students with disabilities, they are less likely to be willing to work with them. Good and Nichols (2001) also highlight the importance of teacher beliefs in impacting student

performance. In fact, Cartledge and Kourea (2008) state that “culturally indifferent teachers who are unaware of their biases and how these beliefs affect their teaching, are educational liabilities” (p.365).

Teacher characteristics have been studied with regard to culturally responsive classrooms for students with disabilities and other differences. Some important teacher characteristics that are regarded as critical in developing responsive classrooms include empathy, caring, humor and involvement with students’ social relations (Ladson-Billings, 1994; Monroe, 2005). Other research studies have focused on the effectiveness of teachers from traditional teacher education programs and those from non-traditional programs. Nougaret, Scruggs and Mastropieri (2005) reported that teachers from traditional educator preparation programs were more effective in the classroom than those from non-traditional programs. Furthermore, they pointed out that the continuing shortage of special education teachers may force school districts to hire less qualified teachers with a high price to be paid for this practice. “Coupled with the high turnover rate of special education teachers, undertrained teachers may become a large and permanent component of the teaching force,” (Nougaret, Scruggs & Mastropieri, 2005, pg. 227). The National Commission on Teaching and America’s Future (2007) reported teacher attrition costs of over \$7 billion each year in America’s public schools. This cost includes the recruitment, employment and preparation of new teachers. New hires are inexperienced, young and may not be the most effective with high need students in low income and low achieving schools. This emphasizes the importance of support for beginning special education teachers, if they are to be retained. Billingsley, Carlson and Klein (2004) reiterated the importance of systemic efforts to support beginning special education teachers. Their research also indicated that beginning teachers were more likely to receive informal support from their colleagues and that the beginning teachers really valued this support.

A study in south Texas (Otto, Jennings & Mitylene, 2005) focused on the level of administrative support as perceived by over two hundred (200) special education teachers. The outcome of this study is consistent with the literature review of the lack of administrative support as being an important factor for special education teachers leaving the teaching field. In the year 2000, Texas had sixty-three thousand (63,300) teacher vacancies. Although some vacancies were created by growth in student population, the attrition rate of twenty-two (22) percent was certainly a statewide concern. This study also concluded that half of the new teachers in Texas were leaving the teaching field within five (5) years. Another Texas study of personnel needs in special education (TCER, May, 2006) identified critical shortages in special education staffing. For example, there were critical shortages of special education teachers, speech language pathologists, and school psychology specialists. Potential emerging shortages included special education teachers working with students who have adaptive behavior issues, bilingual speech pathologists, and bilingual specialists on school psychology.

Even with school districts laying off teachers due to budget considerations, there will always be a high need for special education teachers. Projected enrollment figures by geographic regions appear promising. For example, fast-growing states like Texas, Arizona, Nevada, Georgia and California will experience large enrollment increases by the year 2016 (Lorenzo, 2010). New teachers who are willing to move and have licensures in multiple subjects can become marketable in a field that will continue to need teachers. Therefore, surveying pre-service teacher candidates at an urban institution can provide relevant information and is an important area of research.

Methodology

This study used a survey instrument for data collection. The survey instrument included four (4) parts with distinct questions. The first part consisted of demographic questions for all participants. The second part consisted of questions used to generate background information of participants in this study. The third part included questions for those participants who were not seeking certification in special education. The fourth part consisted of questions for those participants seeking certification in special education.

Survey items were generated using a four-part process. University recipients of a Texas Education Agency (TEA) sponsored grant, which included the current researchers, were presented with data from a similar research study at a general meeting. This led to discussion among the university faculty present, regarding the critical issues in the field of special education in Texas. The researchers involved in this study used the critical issues derived from the meeting to generate specific questions to include in the survey instrument. Following this, the researchers examined all questions to determine if the items reflected the critical issues raised. Those items that best reflected the critical issues were included in the survey, and others were discarded. This process was used to ensure that the instrument measured what it was intended to measure. The final survey instrument included five (5) open-ended questions for background information, five (5) open-ended questions for those participants not seeking certification, and eight (8) open-ended questions for participants seeking special education certification.

The participants included eighty-six (86) general education teacher candidates and seventeen (17) special education teacher candidates. All participants were either in their Junior or Senior year at the College of Education at a large urban Historically Black Colleges and Universities (HBCU) institution. All candidates were working towards teacher certification as well as a Bachelor's degree in Interdisciplinary Studies. The participants included seventy-nine (79) females and twenty-one (21) males, while three (3) participants chose not to identify their gender. With regard to race/ethnicity, the study participants included, eighty-five (85) African Americans, six (6) Hispanic, two (2) Caucasian, one (1) Native American, two (2) African, and two (2) Other. Six (6) of the participants elected not to respond to this question. The survey instruments were distributed to the participants by various faculty in the educator preparation program, and were completed by the participants in their classes and returned to the respective faculty.

Data Analysis

The research survey was descriptive in design, and once the data was collected, it was analyzed using constant comparative analysis (Glaser & Strauss, 1967). During the coding process the researchers and a research assistant broke down the responses to each question based on themes that emerged on perspectives reported by the participants, (Bogdan & Biklen, 1992) and the responses were then classified into different categories. Then the similar categories were integrate. Inter-rater reliability was established by the researchers and the research assistant independently coding the data and then comparing the categories. Only those categories in which there was demonstrated consensus were retained, and the others were discarded. Thus, only those coding categories were retained that had the most substantiation (Bogdan & Biklen, 1992). In this case, those were the most frequently occurring responses. Once all of the data were coded and classified into the different categories, it resulted in the identification of the following categories:

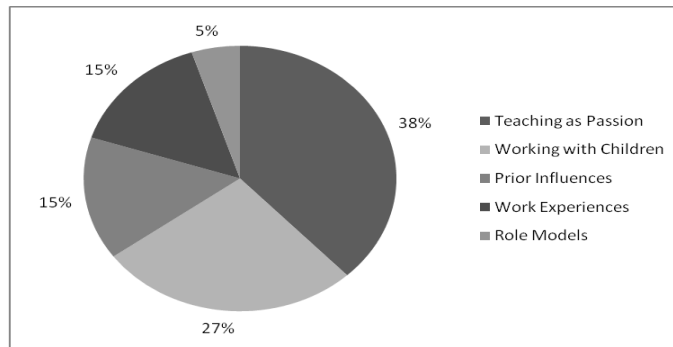
- Teaching as a career
- Leaving the field of special education

- Characteristics of effective special education teachers
- Reasons for not seeking certification in special education
- What makes the special education field attractive
- Reasons for seeking certification in special education

Each category constituted five (5) to six (6) of the most frequently occurring responses. To analyze the current data, descriptive measures including percentages were computed for each of the six categories.

Results

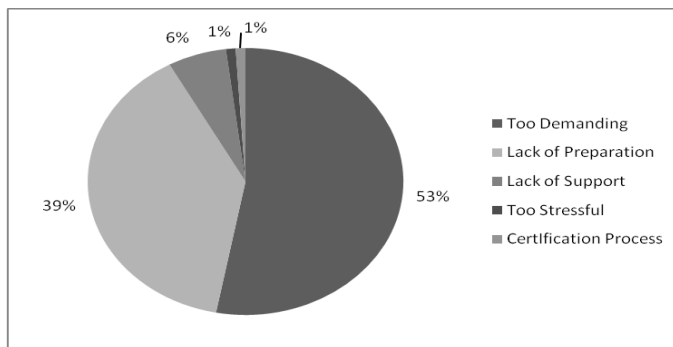
Figure 1: Teaching as a Career



N=103

Figure 1 reports the responses and percentages of why candidates have selected teaching as a career. More than one-third (38%) of the candidates indicated that they had selected teaching as a career because they had a passion for teaching. Slightly over one-fourth (27%) of the candidates indicated they selected the teaching profession because they enjoyed working with children. Fifteen (15%) percent of the candidates indicated that work experiences and prior influences were reasons why they had selected teaching as a career. Finally, about five (5%) percent of the candidates chose teaching as a career because of role models.

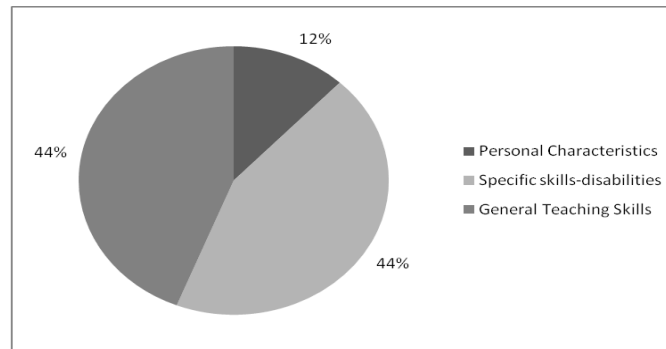
Figure 2: Reasons for leaving the field of special education



N = 17

Figure 2 describes the responses of special education candidates regarding what they believe to be the reasons for teacher attrition in special education. Over half (53%) of the special education teacher candidates surveyed believe that teachers are leaving the field of special education due to the work being too demanding. Interestingly enough, many of these respondents (39%) believe that inadequate preparation for the work is also an important reason why teachers leave this field. However, very few (6%) of the respondents believe that the difficulty of the certification process could be a reason for teacher attrition in special education.

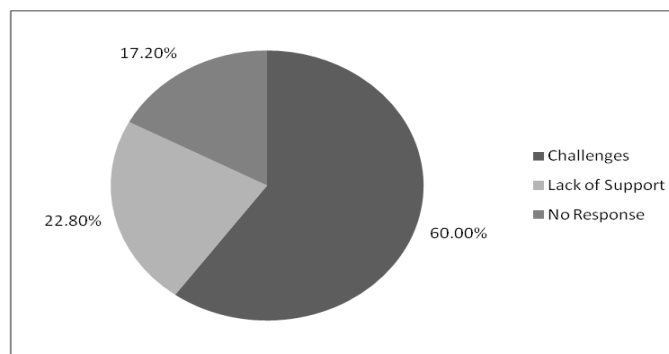
Figure 3: Characteristics of effective special education teachers



N = 103

Figure 3 represents responses from candidates when asked to describe characteristics of an effective special education teacher. The results indicate that an equal amount (44%) reported that personal characteristics and the necessary skills to teach students with disabilities are important factors. A smaller percentage (12%) of the participants perceive the work of a special education teacher to be the same as that of general education teachers.

Figure 4: Reasons for not seeking certification in special education

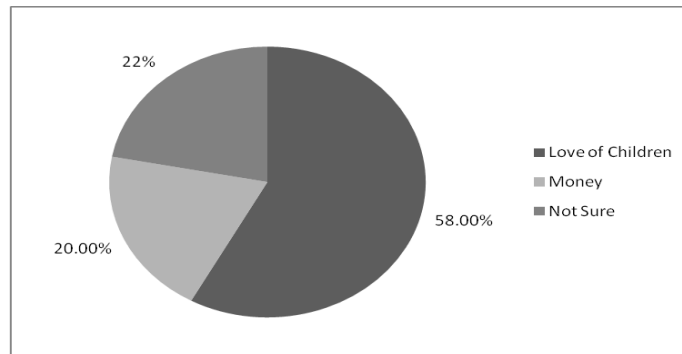


N = 86

Figure 4 looks at responses from candidates regarding their reasons for not seeking certification in special education. It should be noted that only the candidates seeking certification in general education responded to this question. The majority of them (60%) believe the challenges inherent to the work of a special education teacher is the primary reason for not seeking certification in this

area. About seventeen percent (17 %) did not seem to have any specific reason for teacher candidates not seeking certification in special education.

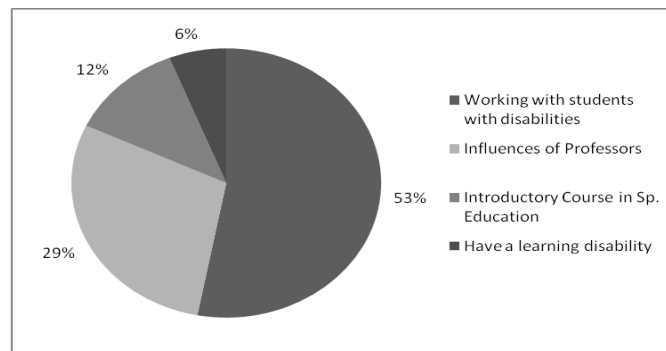
Figure 5: What makes the special education field attractive



N = 86

Figure 5 looks at responses from candidates regarding what makes the special education field attractive. Similar to the previous question, only those seeking certification in general education responded to this question. Most of the respondents (58%) indicated that their love for children might attract them to this field. About twenty percent (20%) indicated that money could be an incentive to teach in special education.

Figure 6: Reasons for seeking certification in special education



N = 17

In this final figure (Figure 6), candidates seeking certification in special education discussed why they had elected to work towards becoming special education teachers. Approximately half (53%) of the respondents indicated that their past experiences of working with students with disabilities was a primary factor in seeking certification in special education. Some (29%), indicated that their professors had an influence in their selection of this field. About six percent (6%) of the participants indicated that having a learning disability was a factor in their selection of special education as their certification area.

Discussion

The purpose of this study was to explore the perceptions of pre-service general and special education teacher candidates regarding special education. The authors chose to focus on pre-service teacher candidates primarily for two reasons: (1) most of the research on teacher retention and attrition has focused on the inservice experiences of special education teachers, and (2) beginning special education teachers are the ones who may help to reduce the ever increasing teacher shortage.

For purposes of the discussion, the authors elected to combine Figure 1 (Teaching as a career) with Figure 3 (Characteristics of effective special education teachers), and Figure 2 (Reasons for leaving the field of special education) with Figure 4 (Reasons for not seeking certification in special education), and Figure 5 (What makes the special education field attractive) with Figure 6 (Reasons for seeking certification in special education).

Most of the respondents believe that the challenges inherent in the work of a special education teachers is one of the primary reasons for teacher candidates not seeking certification in this area. One of the challenges noted by the respondents include lack of adequate preparation, which leaves them ill prepared to cope with the demands of the work and responsibilities outside of teaching. This finding is consistent with the research on attrition in special education. Interestingly, very few of the respondents consider the certification process itself to be a challenge.

An important finding was that most respondents did not perceive special education as an attractive field. This may have implications for the continuing shortage of special education teachers in the state of Texas and nationwide. Consequently, school districts across the country may have to revisit the nature of the work duties and responsibilities of special education teachers. On the other hand, some type of past experiences or influences did appear to be the reason for many of the respondents seeking certification in special education. These influences included prior experience of working with people with disabilities or having a disability themselves. The results indicate that the perceptions of pre-service teachers toward the special education field negatively influenced their decisions to seek certification.

An interesting finding that emerged was that 38 % of the respondents believe that their passion for teaching determined their career choice (Figure 1). However, the respondents were divided equally on their perspectives regarding characteristics of effective special education teachers (Figure 3). This figure illustrates that 44 % of the respondents believe that skills and knowledge contribute towards effectiveness in teaching students with disabilities, while the other 44% believe that personal characteristics determine the effectiveness of a special education teacher. This is substantiated by Tomlinson's (2010/2011) position that knowledge and skills are insufficient to make a good professional. In addition to knowledge and skills, there needs to be what she refers to as *a calling* for that profession. This line of thinking appears to be consistent with respondents' perspectives of the characteristics of an effective teacher. "Patience" was one of the most common personal characteristics reported by the participants. Contrary to this belief, Marzano's (2010/2011) position is that expertise does not happen by chance. According to him, effectiveness is gained through deliberate practice, meaning that the activities of teaching lead to improved performance. In looking at both perspectives, it appears that personal characteristics have equal value with passion and practice in contributing towards the development of an effective teacher.

Implications for practice

While this study was conducted with only one hundred and three (103) pre-service teacher candidates in one institution, it does have important implications for the practice of the profession although these findings cannot be generalized. Any efforts towards changing the profession should

take into consideration the perceptions of pre-service teacher candidates, as they constitute the future pool of teachers. Some of these implications are discussed below.

- Policy makers, professionals in the field, and individuals involved with educator preparation need to communicate to future recruits the importance of the service that special education teachers provide to students with disabilities. In addition, equal focus needs to be placed on the knowledge and skills that make for an effective special education teacher.
- The work of special education teachers has to be considered of equal value to general education teachers in K-12 settings.
- A restructuring of the work responsibilities of special education teachers is advisable to include a greater focus on teaching and less focus on paperwork.
- Greater support is necessary from administrators for special education teachers.
- Continued professional development must be an integral part of teacher performance and evaluation. Special and general education teachers should participate in the same professional development activities, so that both sets of teachers are exposed to the entire repertoire of content, strategies and modifications.
- Collaboration between special education and general education teachers would ensure that special education students are considered an integral part of the student population.

Conclusion

The entire field of education is in crisis in terms of teacher layoffs, teacher evaluations and teacher attrition. The field of special education has been severely impacted by the current situation. The broader issue is that special education is geared towards a population of students who have historically been, and continue to be at the periphery of any reform efforts. While the *No Child Left Behind Act of 2001* and *Individuals with Disabilities Education Act* (IDEA, 2004) have made some sweeping changes to this issue, much work remains if we are to change the attitude of society regarding students with disabilities. As long as students with disabilities are stigmatized, the special education teachers will also be devalued, and fewer teacher candidates will be drawn towards this profession.

About the Authors

Dr. S. Nina Saha-Gupta is currently a professor in the Department of Curriculum & Instruction in the College of Education, Texas Southern University. She earned her Ph.D. in Special Education from Syracuse University, NY. Nina Saha-Gupta teaches undergraduate, Masters' and doctoral student in Curriculum & Instruction. She also serves as an advocate for parents of students with disabilities.

Dr. Margarita Lara recently retired from Texas Southern University where she was an Associate Professor in the Department of Curriculum & Instruction in the College of Education. She earned her Ed.D. in Curriculum & Instruction with Bilingual Specialization from the University of Houston (UH) in Houston, Texas.

Mr. Jeff House graduated with a B.S. in Interdisciplinary Studies with a focus on special education, from Texas Southern. He is currently a teacher in South Houston High School, Pasadena ISD. He teaches Principles of Architecture & Construction and Construction Technology.

References

- American Association for Employment in Education. (2008). *Educator supply and demand in the United States: 2008 Executive Summary*. Columbus, OH: Author. Retrieved February 5, 2011 from www.aee.org/cwt/external/wcpages/resource.
- Billingsley, B.(2004). Promoting teacher quality and retention in special education. *Journal of Learning Disabilities, 37*(5), 370-376.
- Billingsley, B., Carlson, E., & Klein, S. (2004). The working conditions and induction support of early career special educators. *Exceptional Children, 70* (3) 333-347.
- Boe, E. E., Cook, L. H., & Sunderland, R. J. (2008). Teacher turnover: Examining exit attrition, teaching area transfer, and school migration. *Exceptional Children, 75*, 7-31.
- Bogdan, R.C., & Biklen, S.K. (1992). *Qualitative research for education. An introduction to theory and methods*. Boston: Allyn & Bacon.
- Brownell, M. T., Smith, S. W., McNellis, J. R., & Miller, M. D. (1997). Attrition in special education: Why teachers leave the classroom and where they go. *Exceptionality, 7*(3), 143-155.
- Brownell, M., Smith, S., McNellis, J., & Lenk, L. (1995). Career decisions in special education: Current and former teachers' personal views. *Exceptionality, 5*, 83-102.
- Cartledge, G. and Kourea, L. (2008). Culturally responsive classrooms for culturally diverse students with and at risk for disabilities. *Exceptional Children, 74* (3), 351-371.
- Davis, H. & Andrzejewski, C. (2009). Teacher beliefs. *The Gale Group*. Retrieved from: Education.com.
- DeMik, S.A. (2008). Experiencing attrition of special education teachers through narrative inquiry. *The High School Journal, 92*(1), 22-32.
- Eisner, E.(2006). The satisfactions of teaching. *Educational Leadership, 63*(6), 44-46.
- Engelbrecht, P., Oswald, M., Swart, E., & Eloff, I. (2003). Including learners with intellectual disabilities: Stressful for teachers? *International Journal of Disability, Development, & Education, 50*, 293-308.
- Glaser, B.G., & Strauss, A.L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. New York: Aldine De Gruyter.
- Good, T.L., & Nichols, S.L. (2001), Expectancy effects in the classroom: A special focus on improving the reading performance of minority students in first grade classrooms. *Educational Psychologist 36* (2), 113-126.

- IDEA (2004). Individuals with Disabilities Education Act. Retrieved March 1, 2011 from <http://idea.ed.gov>.
- Ingersoll, R., & Smith, T.M. (2004). Do teacher induction and mentoring matter? *NAASP Bulletin*, 88 (638), March 2004, 28-40.
- Kaff, M. (2004). Multitasking is multitasking: Why special educators are leaving the field. *Preventing School Failure*, 48(2),10-17.
- Ladson-Billings, G. (1994). *The dreamkeepers: Successful teachers of African American children*. San Francisco: Jossey-Bass.
- Lorenzo, G. (2010). *Job Outlook for Teachers*, Lorenzo Associates, Inc. Retrieved January 29, 2011 from <http://www.edpath.com/guidetool/job%20outlook%20teachers.html>
- Lortie, D.C. (1975). *Schoolteacher: A sociological study*. Chicago: University of Chicago Press.
- Martin, A.M. (2010). *Predictors of burnout and self-efficacy among special education teachers*. (Doctoral dissertation), Teachers College, Columbia University, 2010.
- Marzano, R.J. (2010/2011). Art & science of teaching. What teachers gain from deliberate practice. *Educational Leadership*, 68(4), 82-85.
- Monroe, C.R. (2005). Why are “bad boys” always black? Causes of disproportionality in school discipline and recommendations for change. *The Clearing House*, 79, 45-50.
- National Commission on Teaching and America’s Future (2007). *The high cost of teacher turnover* (Policy Brief). Retrieved February 10, 2011 from <http://www.nctaf.org>
- Nichols, S. M. C., Bicard, S. C., Bicard, D. F., & Casey, L. B. (2008, April). A field at risk: The teacher shortage in special education. *Phi Delta Kappan*. 89, 597-600.
- Nougaret, A.A., Scruggs, T.E., & Mastropieri, M.A. (2005). Does teacher education produce better special education teachers? *Exceptional Children*, 71 (3), 217-229.
- Otto, Jennings, S., & Mitylene, A.(2005). A study of experienced special education teachers’ perceptions of administrative support. *College Student Journal*, 39 (2), Retrieved January 20, 2011 from: <http://web.ebscohost.com>
- Provost. J. (2009). Special education personnel needs: Matters of quality as well as quantity. *Journal of Special Education Leadership*, 22(2), 105-107.
- Size, S. (2009). A literature review: Preservice teachers’ attitudes towards students with disabilities. *Education*, 130(1), 53.
- Texas Center for Educational Research (2001). *The Statewide Study of Special Education Professionals’ Personnel Needs*. Austin, TX: NCER.
- Texas Center for Educational Research (2006). *Texas Study of Personnel Needs in Special Education*. Austin, TX: NCER.

Tomlinson, C.A. (2010/2011). Notes from an accidental teacher. *Educational Leadership*, 68(4), 22-26.

U.S. Bureau of Labor Statistics (2010). *Teacher Shortage Areas Nationwide Listing 1990-1991 thru 2010-2011, March 2010*. U.S. Department of Education, Office of Postsecondary Education (Policy & Budget Development Staff).

Zabel, R.H. & Zabel, M.K. (2001). Revisiting burnout among special education teachers. Do age, experience, and preparation still matter? *Teacher Education and Special Education*, 24, 128-139.

Appendix

Research Questions

Please circle the appropriate option:

- a. **Current status:** Freshman Sophomore Junior Senior
- b. **Gender:** Male Female
- c. **Race/ Ethnicity:** African American Hispanic Caucasian
Asian Native American African Other
- d. **Projected graduation year:**
- e. Are you currently employed in a K-12 classroom? Yes
No
- If yes, what is your position? _____

Please answer all the questions and provide as much information as you can.

1. Are you currently in a teacher certification program? Yes No.
2. What is your area of specialization? _____
3. Will you seek certification in any other area? If yes, specify area _____
4. What made you choose teaching as a career?
5. What made you choose the specific area in which you are seeking certification?

Questions 6 - 10 are for those candidates who *are not* seeking certification in special education.

6. a. If you are not currently a special education major, would you seek certification in that area at any point? Yes No
b. If your answer is no, explain why not.
c. If your answer is yes, explain why.
7. What is your understanding of the work of a special education teacher?
8. a. Does the work of a special education teacher, as you understand it, appeal to you? Yes
No
b. If yes, explain why.
c. If no, explain why.
9. In your opinion, what factors might **encourage** you to seek certification in special education?

The Teacher Preparation Initiative

Dr. Yolanda Salgado, Dr. Janet A. Carter, Dr. Jeannine Hurst, and Dr. Ann Marie Smith

Many American public schools categorize students as a *high risk* for a variety of reasons (Mehan, Villanueva, Hubbard, & Lintz, 1996), and these students typically struggle more to achieve academic success in comparison to their privileged peers, those who receive benefits, advantages, or greater access to resources based on membership in a dominant cultural group (McAuliffe, 2013; Tharp, 2012). However, many of these high-risk students achieve academic success similar to that of their privileged peers in spite of the risk factors. What sets these successful high-risk students apart from similar peers who do not succeed? Stanton-Salazar (2001) researched academically successful minority or non-Anglo youth and identified relationships as a key factor, specifically those relationships built with school personnel and college-bound peers. These relationships reflected sources of knowledge associated with the more privileged members of a society.

Advancement Via Individual Determination (AVID), a college readiness program, began in a privileged society in the early 1980s when inner city students were bused to suburban schools following the *Brown vs. Board of Education* federal court decision to desegregate city schools. Clairemont High School was an all-White, academically acclaimed privileged school where Mary Catherine Swanson, then head of the English department in San Diego, began her quest to help underserved students entering her school. Her way of providing assistance to these underprivileged students included academic and social support without minimizing academic standards. The idea of holding students accountable to the highest standards became a key component of AVID's philosophy (Freedman, 2000). Using research-based methods of effective instruction and providing meaningful and motivational professional learning, AVID continues to use this model to enhance learning and provide support, transforming struggling students in local public schools into college-bound success stories. More recently, AVID entered the higher education arena.

In 2010, the Education Foundation of Odessa, Texas played an instrumental role in bringing AVID to local academic arenas: Ector County Independent School District (ECISD), Odessa College (OC), and the University of Texas of the Permian Basin (UTPB). The commitment provided opportunities for AVID students to enroll in dual credit higher education courses and to receive credit for both high school and college courses. The Foundation also hosts annual showcases that celebrate the program's successes and transformations: "Over the past three years, the AVID program has graduated 193 students and of those students, 190 of them have been accepted into college" (Ector County Independent School District, n.d., "Reaching Higher"). While AVID succeeded in local schools, incoming college freshman continued to struggle and student retention at UTPB averaged only 45%, so the higher education administration team at UTPB decided to implement AVID in freshman courses, modeling the same concept of AVID to incoming UTPB freshmen by providing the support and motivation for them to rise to the rigor of college coursework. Professors became mentors in this process, and freshman courses included AVID strategies. The freshman-level initiative proved successful, which drew the attention of faculty in the College of Education.

The AVID Teacher Preparation Initiative

Given the success of UTPB's partnership with AVID to retain freshman students, some of whom were students from local school districts where the AVID program was available, it seemed advantageous for the university to further extend implementation of AVID. During fall 2010, the president of university approached the College of Education about participating in a proposed Teacher Preparation Initiative (TPI), a plan to infuse AVID philosophies and strategies into the training of pre-service teachers, creating a pool of prospective teachers who would already be trained in AVID's student engagement strategies upon completion of teacher certification. The faculty embraced the vision and began a quest to create a national AVID teacher preparation center at UTPB. This was a new venture for both the AVID Center and the university, and no model existed for infusing AVID strategies in a teacher preparation program. The faculty at the University of Texas at Arlington (UTA) were already investigating how to incorporate AVID into their university, and they invited input from UTPB. Faculty at UTA and UTPB combined forces to deal with an almost overwhelming project to define and implement a meaningful approach for their respective universities, one that could be adapted by other universities in the future. By the end of the fall 2010 semester, UTA, UTPB, and the AVID Center established a partnership to collaborate on the design of an AVID program for higher education.

In the preplanning stages, UTPB faculty developed and committed to several TPI-related goals: 1) gain familiarity with AVID's application to specific content areas (including Educational Leadership and School Counseling graduate programs), 2) develop a faculty research framework, 3) create an implementation plan to AVIDize courses, 4) connect AVID strategies with existing teacher improvement grants, and 5) align AVID implementation with accreditation and institutional effective goals. Additionally, UTPB faculty committed to delivering AVID through a professional development school (PDS) framework and to becoming AVID trainers for local teachers. Over the next two years, UTPB faculty participated in selected professional development workshops presented by AVID trainers in the areas of math, language arts, critical reading, social studies, student success, and English-language learning. The workshops were open to teachers from local and surrounding districts and to UTPB pre-service teacher candidates and student teachers. The workshops also facilitated communication between all participants and AVID representatives, not only providing professional development for faculty, future teachers, and current teachers but also serving as venue for giving ongoing input to the AVID organization about the needs of pre-service teachers and university faculty.

As work on the TPI unfolded, a group of nine faculty members were selected to serve as AVID Site Team "Fellows." One of the AVID Site Team Fellows served as the liaison between UTPB and the AVID Center. This faculty team met formally each month to share updates about courses in their programs and to discuss successes and difficulties associated with infusing AVID strategies across different content areas or "strands" of teacher preparation. Each Fellow possessed a passion for the TPI project and each represented a different strand of teacher preparation. Fellows presented an AVID strategy at each monthly meeting in order to share knowledge across strands, striving to deliver specific strategies at multiple points in the teacher preparation program. Together, the AVID Fellows formed a faculty within a faculty and encouraged a balanced approach to the TPI. The Fellows also attended AVID's National Summer Institutes, intensive three-day workshops that provided faculty with deeper exposure to the content of their selected strands. The Summer Institutes also allowed UTA and UTPB faculty time to collaborate with each other and with AVID, to plan for the coming year, and to differentiate the TPI programs based on individual campus needs for teacher preparation, faculty training, and research efforts.

During the fall of 2010, UTPB faculty reviewed their syllabi and looked for opportunities to insert AVID strategies or to continue already existing strategies that substantially aligned with AVID. These strategies were labeled or redesigned to reflect AVID requirements so that both the instructor and the teacher candidates could readily recognize them. Faculty matched specific objectives to assignments involving AVID's core learning strategies of "writing, inquiry, collaboration, organization, and reading to learn" (AVID, n.d., para 1). At the end of the 2010-2011 year, faculty discovered they had added more strategies than they could effectively deliver in their courses. Faculty focused on reviewing syllabi and identifying which strategies to retain. UTPB faculty continued the AVIDizing process during the 2011-2012 year, closely analyzing courses to ensure that instructors were trained in AVID and that strategies were in place. Courses were identified as AVID-infused courses after completion of this review process. During the fall 2011 semester, a total of 8 UTPB faculties offered 14 AVID-embedded, undergraduate teacher preparation courses. During the spring 2012 semester, an additional 10 AVID-infused courses were added to the teacher preparation curriculum, bringing the total number of courses to 24 (see Table 1).

To facilitate instruction, modeling, and practice of AVID strategies in teacher preparation courses, a 30-seat capacity room was committed to the AVID TPI project by the UTPB president. It serves as a lab and is equipped with movable tables rather than desks, and candidates are no longer surprised when furniture is pushed aside to allow for circle formations or when tables are shoved together for small group discussions. This is not a traditional desk-facing-front kind of classroom but one that is set for movement, for sharing in groups or in circles, and for hands-on learning. It is not a quiet classroom but one that actively instills AVID qualities in teacher candidates. Two walls are usually decorated with candidate work including word walls, an idea exchange poster (the parking lot), AVID one-page assignments, and other strategy relics. Technology allows for demonstration lessons and internet support. Guests are welcome to observe teaching in action, and the room is becoming a room where candidates feel comfortable to rest, chat, or study when it is not in use.

As a further aid to planning and implementation of AVID strategies in teacher preparation courses at UTPB, three of the AVID Fellows initiated a mapping process that charted the AVID strategies included in each course. Each course map was cross-checked with other AVID courses. The resulting grid provided a graphic of instructional alignment so faculty could see how specific strategies changed with the developmental stages of children. For example, the Cat and Fish strategy in the Early Childhood to Sixth Grade course morphed into Philosophical chairs in middle school grades and into Socratic Seminar in high school. As courses were reviewed each semester, the mapping process continued and illuminated the preferred strategies across the TPI. By placing the strategies into the framework course by course, faculty ensured that writing, inquiry, organization, and reading were present on a regular basis in each AVID course. Mapping also allowed for purposeful scaffolding for pre-service teacher candidates as they progressed through their certification programs.

As faculty taught, they focused on making connections between course content from textbooks and AVID strategies that teacher candidates learned in class. Teacher candidates were provided with instruction that allowed them to see that the AVID strategies, regardless of name, were research-based methods. From the beginning, the faculty concentrated on not re-inventing the wheel; instead, faculty retained existing best practices, merged them with newly acquired AVID strategies, and aligned them with program, college, institutional, and accreditation standards. The goal was to provide both the faculty and the pre-service teachers with a common strategy toolbox

that was also familiar to the leadership in local school districts so that when UTPB candidates were interviewed for teaching positions they were prepared to teach with AVID training.

At the end of each semester, the faculty involved in the TPI reflected on their progress in reports to the AVID liaison. Faculties were ready to expand the TPI to more graduate courses while continuing to refine pre-service courses. At the ongoing training sessions with AVID professional staff, faculty explored potential ways to include AVID strategies within online courses. The Fellows at UTPB and UTA were invited to write a handbook for implementing AVID in post-secondary education. Once this handbook was completed, specific steps involved in implementing AVID within teacher preparation programs were efficiently outlined for other colleges and universities invested in producing prospective teachers who can effectively deliver best practices in the classroom. The TPI is now rapidly moving to other institutions.

Context

The region in which the TPI is taking place is unique for several reasons. First, it is not uncommon for school districts in this region to be separated by over 100 miles. In the same region, the oil and gas commerce is propelling the economy to employment rates not seen since the late 1980s. This oil and gas industry has resulted in unparalleled enrollments in several school districts in this region, including ECISD, the district partnering with the AVID TPI. In addition to the growth in student population, the demographics of these students are more culturally and linguistically diverse and include a large number of students from outside of the state. UTPB, one of the universities where the AVID TPI is currently housed, recently celebrated its 40th anniversary. The university began as a junior/senior university that had articulation agreements with two local community colleges. The university is classified as a Hispanic Serving Institution (HSI) and has an approximate enrollment of 4500 students. The university student body is comprised of 55% Hispanic students who are mostly identified as first generation college students, some with families and working full-time. Enrollment in the College of Education during Spring 2013 included 162 (47.5% Hispanic/Latino, 47% White/non-Hispanic, and 5.5 % other ethnic groups) undergraduate teacher certification students, 129 (28.7% Hispanic/Latino, 65.1% White/non-Hispanic, and 6.2% other ethnic groups) degree-seeking graduate students, and 59 (40.7% Hispanic/Latino, 50.8% White/non-Hispanic, and 8.5% Black/African American) 82.8% non-degree-seeking graduate students who were pursuing certification. The university is part of a larger university system but is isolated from the majority of the other university system schools.

ECISD, the district partner that the AVID TPI has worked most closely with is the largest school district in the region and enrolls approximately 30,000 students. Like many districts in the region, its student body is culturally diverse with 70% of its students identifying as students of color. Additionally, the district has struggled with low achievement and bleak graduation rates among its students. For example, very few students reach college readiness standards, and fewer students show scores ready for college in the areas of literacy and mathematics. For instance, only 57% of tested students were college ready in math. As a result, the district contracted with AVID to increase its college readiness standards in hopes that more students will be college ready and prepared to achieve with the college content.

Method

To assess the level of AVID implementation within the TPI, students enrolled in teacher preparation courses during the spring 2012 semester were asked to complete a 12-item, online

questionnaire developed specifically for the TPI (See Appendix A). The questionnaire included items about student demographics, student exposure to AVID, and student experiences with AVID as part of teacher preparation courses. Students were provided with a link to the online questionnaire and encouraged to participate, but students were not offered incentives for responding. A total of 35 participants completed the questionnaire near the end of the spring 2012 semester. Of those 35, a total of 28 (80%) had transferred to UTPB from other institutions (e.g., community college, other 4-year colleges). More than half the participants (54.3%) were enrolled in 3 – 4 teacher preparation courses during the spring semester, 22.9% were enrolled in 1 – 2 courses, and 22.9% were enrolled in 5 courses. Approximately half ($n = 18$, 51.4%) of the participants had previously attended training conducted by AVID staff.

Results

Participants identified which AVID strategies they had observed in their teacher preparation courses and which AVID strategies they had practiced and used. Observed and practiced strategies are summarized in Table 1. The most frequently observed AVID strategies included parking lot, focused note taking (Cornell Notes), Costa's levels of thinking and questioning, Think-Pair-Share, Think Aloud, SLANT, buzz groups, summary reflections, DLIQ (what did you Do, Learn, Interest and Question learning log), and two- or three-column notes. Those strategies were also the strategies that participants reported using most frequently. In most cases, the percentage differences between the strategies observed in the classroom and those strategies employed by students closely corresponded, with percentage differences of 5% or less. The results indicated a percentage difference of more than 5% for only one AVID strategy: focused note taking with 2 – 3 column notes (difference = 10). It is important to note that the 2 to 3 column note-taking strategy is the precursor to Cornell note taking, with Cornell note-taking subsuming the simpler 2 – 3 column method that is intended for younger age groups. Therefore, 10-point difference between observing the strategy and actually doing the strategy does not necessarily imply that participants did not learn the skills.

Although this is a very small sample, trends are evident. In general, the more often participants observed strategies in teacher preparation courses, the more they reported actually practicing the strategies. Thirty-four participants from the total sample of 35 reported feeling very confident (38.2%, $n = 13$) or somewhat confident (61.8%, $n = 21$) about using AVID strategies. Anecdotal evidence reported by teacher candidates indicates that they recognize AVID strategies in action in the district. Candidates have planned lessons with AVID strategies, and the districts where candidates were placed seemed to be more comfortable with allowing teacher candidates to present AVID strategies to small and large groups. Comments during discussions in class and reflections in field packets suggested that the candidates were more comfortable when asked to conduct tutorials and small group interventions. Student teachers included AVID lessons in their teaching experiences.

Discussion

The College of Education faculty committed to the TPI in an effort to improve pedagogical practices and enhance student engagement. This paper reports on initial implementation efforts, and research related to the impact of AVIDizing teacher preparation courses is an ongoing effort. However, the initial results are promising. The AVID training incorporated in the TPI project added to the knowledge base and analytical ability of the UTPB faculty. As faculty members attended various training strands, they recognized that some of their existing teaching practices closely paralleled AVID strategies, which are aligned with best practices. Faculty have enjoyed the

student engagement and energy that AVID strategies produced in the classroom. Teacher candidates are reportedly recognizing AVID strategies in placement settings and are becoming more confident about their ability to use these strategies in the classroom.

Because UTPB has a limited number of students who have been exposed to AVID strategies across multiple courses prior to their field placements, the findings here are preliminary. The full impact of the TPI will not be adequately assessed until teacher candidates receive exposure to AVID strategies in all teacher preparation courses and apply the learned strategies within their field placements under the supervision of trained AVID teachers who can provide an adequate assessment of AVID-related skills. Furthermore, it is also unclear how the unique contextual factors of the region will impact the results. The faculty at UTPB may see more gains simply because so many students in the region face academic risk factors. The regional impact will only be parsed out as other universities implement TPIs and group comparisons can be made. However, faculty involved in the TPI remain committed to disseminating best teaching practices to students and other professionals.

Table 1
Observed and Practiced AVID Strategies

AVID Strategy	% Obs (<i>n</i>)	% Prac (<i>n</i>)	Diff	% Diff
Summary reflections	61.8% (21)	55.9% (19)	2	5.9
DLIQ	61.8% (21)	50.0% (17)	4	11.8
Stretch Journal	35.3% (12)	23.5% (8)	4	11.8
Think-Pair-Share	70.6% (24)	55.9% (19)	5	14.7
Philosophical Chairs	8.8% (3)	5.9% (2)	1	2.9
Socratic Seminar	8.8% (3)	8.8% (3)	0	0
Costa's Levels of thinking and questioning	76.5% (26)	76.5% (26)	0	0
Jigsaw	44.1% (15)	32.4% (11)	4	11.7
Four Corners	35.3% (12)	26.5% (9)	3	8.8
Carousel Brainstorming	50.0% (17)	44.1% (15)	2	5.9
Buzz Groups	64.7% (22)	55.9% (19)	3	8.8
Interactive Notebooks	41.2% (14)	32.4% (11)	3	8.8
Focused Note-taking: 2-3 Column Notes	61.8% (21)	32.4% (11)	10	29.4
Focused Note-taking: Cornell Notes	76.5% (26)	61.8% (21)	5	14.7
Socratic Seminar	8.8% (3)	8.8% (3)	0	0
Parking Lot	79.4% (27)	64.7% (22)	5	14.7
STAR	50.0% (17)	35.3% (12)	5	14.7
SLANT	64.7% (22)	58.8% (20)	2	5.9
Critical Reading: Rereading the text	44.1% (15)	35.3% (12)	3	8.8
Critical Reading: Charting the text	29.4% (10)	29.4% (10)	0	0
Critical Reading: Pausing to connect ideas	38.2% (13)	29.4% (10)	3	8.8
Marking the text	50.0% (17)	38.2% (13)	4	11.8
Think Aloud	70.6% (24)	64.7% (22)	2	5.9
KWLHW	55.9% (19)	47.1% (16)	3	8.8
FLIP	14.7% (5)	11.8% (4)	1	2.9
SMART goals	23.5% (8)	26.5% (9)	-1	-3
Speaker's Panel	8.8% (3)	2.9% (1)	2	5.9
Concept Mapping	38.2% (13)	26.5% (9)	4	11.7
Historical Timeline	47.1% (16)	38.2% (13)	3	8.9

Note: Strategies in bold text were most frequently observed in teacher preparation courses

Appendix A
AVID Teacher Preparation Initiative Questionnaire

1. What term (e.g., fall 2011) did you enter the teacher education program?

2. Did you transfer into this university from another institution? If yes, please enter the name of the institution you transferred from.

3. Please enter the name of the institution you transferred from.

4. How many teacher candidate courses are you currently enrolled in?

5. Have you received direct training in the AVID strategies by an AVID staff developer (i.e., attended training conducted by AVID)?

6. Please list the trainings you have attended and what benefit you received.

7. Have your instructors used AVID strategies in one or more of your courses within the teacher preparation program? If yes, please check all that you have observed.

8. How often do your instructors use AVID strategies (WICOR) during class?
 - a. Every class meeting
 - b. 75% of class meetings
 - c. 50% of class meetings
 - d. 25% of class meetings
 - e. Less than 25% of class meetings

9. Please indicate which AVID strategies you've *used* (practiced) in your teacher candidate courses (mark all that apply):

10. Overall, how confident are you using the AVID strategies?
- Very confident
 - Somewhat confident
 - Not very confident
11. As a result of exposure to the AVID strategies, has your level of confidence in teaching
- Decreased greatly
 - Decreased somewhat
 - Remained the same
 - Increased somewhat
 - Increased greatly
12. Please provide any additional comments regarding your experience or about this questionnaire.

About the Authors

Dr. Yolanda Salgado is an Assistant Professor and the Program Coordinator of Bilingual/ESL at the University of Texas of the Permian Basin. Her research interests focus on identifying different perceptions immigrant parents consider when making decisions in the newly-arrived educational arena where they will situate their children.

Dr. Janet Carter is an Assistant Professor and the Program Coordinator of Counseling Education at the University of Texas of the Permian Basin. Her research interests include measurement invariance, parenting interventions, and management of disruptive behavior in the classroom.

Dr. Jeannine Hurst is an Associate Professor and the Program Coordinator for Reading at the University of Texas of the Permian Basin. Her research interests include teaching methods for struggling readers, mentoring pre-service teachers and investigating strategies for enhancing the learning experience for ELL students.

Dr. Ann Marie Smith is an Assistant Professor of Reading at the University of Texas of the Permian Basin. Her research interests include critical literacy, critical pedagogy and adolescent literature.

References

- AVID. (n.d.). "WICOR: AVID's Foundation for High Engagement Teaching and Learning." Retrieved from http://www.avid.org/dl/hed/hed_reviewofliterature.pdf
- Ector County Independent School District. (n.d.). "Reaching Higher." Retrieved from <http://www.ecisd.info/succeed>
- Freedman, J. (2000). *Wall of Fame: One teacher, one class, and the power to save schools and transform lives*. San Diego, CA: AVID Academic Press.
- McAuliffe, G. (2013). *Culturally alert counseling: A comprehensive introduction* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Mehan, H., Villanueva, I., Hubbard, L., & Lintz, A. (1996). *Constructing school success: The consequences of untracking low-achieving students*. New York: Cambridge University Press.
- Stanton-Salazar, R. D. (2001). *Manufacturing hope and despair: The school and kin support networks of U.S.-Mexican youth*. New York: Teachers College Press.
- Tharp, D. S. (2012). Perspectives: A language for social justice. *Change*, 44(3), 21-23. doi: 10.1080/00091383.2012.672918

JOURNAL OF TEACHING EFFECTIVENESS AND STUDENT ACHIEVEMENT

2015 CALL FOR MANUSCRIPTS AND PUBLICATION GUIDELINES

Data from the National Center for Education Statistics (2011) indicates that almost a third of America's teachers leave the field sometime during their first three years of teaching. The attrition rate for those who enter through some alternative pathway can be as high as 60%. New teachers cite classroom management, ESL, and lack of preparation or support as key reasons behind their decision. Therefore, additional training that increases new teacher confidence and preparation is vital. Quality training for teachers entering 21st century classrooms and appropriate instructional practices for today's learners is a must.

The *Journal of Teaching Effectiveness and Student Achievement* is dedicated to the dissemination of research emphasizing teacher preparation, successful school cultures, teacher quality, instructional effectiveness, innovative pedagogy, and educational practices with student achievement in mind.

Call for Papers:

For the 2015 Winter issue, the journal is soliciting articles designed to promote student achievement through the effective preparation and retention of new teachers.

Guidelines:

1. Manuscripts should not exceed 15 typewritten pages, including references, charts, and tables.
2. All manuscripts should conform to the *Publication Manual of the American Psychological Association* (2009, 6th ed.), including an abstract of 100-150 words.
3. Authors must submit a cover letter explaining the relationship of the article to the journal's purpose. The author must indicate that the manuscript represents original material and is not currently under consideration by any other publication.
4. A cover page should include the following: title of the manuscript, author's name and affiliation, contact information (email, phone, address), and a brief bio of the author(s), not exceeding 50 words per author.
5. No identifying information (last name, affiliation) should be included beyond the cover page.
6. Please include page numbers.

Submission Deadline:

Submissions are due by August 29, 2014 and should be made electronically to journalofteach@gmail.com.

The *Journal of Teaching Effectiveness and Student Achievement* editorial team will evaluate articles submitted for publication consideration. Manuscripts must adhere to the guidelines above, and authors should expect to receive notification of the publication decision within 6 weeks of the deadline. The editor reserves the right to make editorial changes, but any significant proposed changes will be discussed with the primary author prior to publication.

Reviewers Needed:

If you are interested in serving as a reviewer for Winter 2015, please send an email indicating your interest, as well as a copy of your vita and review experience, to Dr. Amy Williamson, Editor, at amy.williamson@angelo.edu, or Dr. Blake Hightower, Co-Editor, at blake.hightower@angelo.edu.

The following timeline is expected for the 2015 Winter Issue:

Manuscripts Due	August 29, 2014
Editorial Board Reviews	September 2014
Authors Contacted with Editorial Decision	October 2014
Editing and Final Changes Due	Mid November 2014
Winter Issue Available	January 2015