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Edited by
Evan Ortlieb
& Randall Bowden

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Editorial advisory panel

At least two members of the editorial advisory panel reviewed every manuscript submitted to the yearbook editors.

We deeply appreciate their efforts.

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Foreword

Evan Ortlieb

As we inquire, investigate, and problem solve, we become more aware of how much there is to discover about teaching and learning as well as leading educational systems. The dissemination of research findings is also quintessential; otherwise, we continue to have replication instead of enhancement.

Using this philosophy, the Consortium for Educational Development, Evaluation, and Research (CEDER) at Texas A&M University–Corpus Christi issued a call for manuscripts to Colleges of Education throughout the state of Texas and more broadly, the nation. We reviewed 36 manuscripts written by 52 authors. From that group of manuscripts, we selected 13 for publication. Each manuscript considered for inclusion in the 2012 CEDER Yearbook was peer-reviewed by two members of the editorial review board via a double-blind process. The selected set of manuscripts highlights educational research and innovations from acclaimed university scholars throughout the nation.

Manuscripts have been categorized into the two following sections: K–12 Education and Higher Education. Within the K–12 area of study, authors present papers on preschool teachers' perspectives of cultural relevant practices (Hu), effective questioning techniques to maximize student learning (Pate), difficulties associated with reading instruction of students with disabilities (Gauthier & Schorzman), and the nature of dyslexia, past and present, including how classroom teachers can provide necessary accommodations (Culbertson). Caring Organizational Practices that Enhance Success (COPES) provide teachers with transition tools necessary for their middle school students (Paciotti &

Hill), while we can also learn about adolescent literacy instruction from already motivated black female readers (Groenke, Bennett, & Hill). We also find that early college high school programs can provide a positive experience for students (Valadez, McDowell, Loveless, & DeLaGarza).

Papers within the Higher Education section relate to building teacher preparation programs infused with theory (Chehayl), utilizing technological advances in developmental reading courses (Loveless & Bryant), and combining what we know about oral reading fluency towards understanding electronic texting fluency (Ortlieb). We also investigate the possibilities of using mixed methods in dissertation work (Stoves & Smith), discuss the relative transparency of higher education (Schell), and examine the relationship between English language learners' underdeveloped first language and teacher certification test performance (Ward & Lucido).

K–12
education

Exploring the cultural relevance of developmentally appropriate practices from the point of view of preschool teachers in Beijing

Bi Ying Hu

Abstract

The adoption of Developmentally Appropriate Practice (DAP) principles in China has resulted in continuous revisions to the national curriculum framework guiding preschool classroom practices there. Professionals have questioned the culturally appropriate ideology of DAP in the Chinese society. Therefore, the purpose of this study was to explore the cultural relevance of DAP principles from the views of preschool teachers in Beijing. Findings suggested a large gap between Chinese preschool teachers' DAP beliefs and activities. In terms of group differences, teachers who had taught between seven to 19 years and teachers of preschool classes showed the most positive profiles. Based upon the results of MANOVA and discriminant function analysis, group differences were related to developmentally appropriate beliefs when examining the influence of class type (kindergarten class versus preschool class). When examining the influence of years of teaching experience, group differences were related to teachers' use of developmentally appropriate activities. The article also provides implications, limitations of the current study, and recommendations for future research.

Introduction

The Developmentally Appropriate Practices (DAP) principles, generated by the National Association for the Education of Young Children (NAEYC), advocate for a constructivist approach in early childhood

teaching and learning. DAP principles emphasize children's initiation in exploring learning activities and interactions with materials, teachers, and peers (Breakman, 1987; Copple & Bredekamp, 2009). The central concepts of DAP principles include age appropriateness, individual appropriateness, and cultural appropriateness; teachers are encouraged to infuse such concepts in making adaptations to the curriculum, materials, or activities. Since 1987, research has been conducted in the United States to investigate teachers' perceptions and implementation of DAP to promote the quality of early childhood education (Adcock & Patton, 2001; Burts, Hart, Fleege, Mosley, & Thomason, 1992; Burts et al., 1993; Charlesworth, Hart, Burts, & Hernandes, 1991; Charlesworth, Hart, Burts, Mosley, & Fleege, 1993; Goldstein, 2008; Hatch & Freeman, 1988; Hoot, Parmer, Hujala-Huttunen, Cao, & Chacon, 1996; Jones & Gullo, 1999; Nespor, 1987; Smith & Shepard, 1988; Zambo, 2008). The DAP guidelines and practices have been widely acknowledged and used by professionals in the early childhood field even though limited research exists to support its effects on child outcomes including learning and psychosocial development (Horn, Karlin, Ramey, Aldridge, & Snyder, 2005).

The practical and philosophical foundations of DAP principles also have strong influences on early childhood educational policies and practices all over the world. Many countries adopted the DAP principles, infused them into teacher preparation programs, and implemented them in classroom practices (e.g., Doliopoulou, 1996; Hoot et al., 1996; Park, 1996; Szente, Hoot, & Ernest, 2002). For instance, in India, "the basic premises of developmentally appropriate practice have been in place at the policy level" for quite some time (Jambunathan & Caulfield, 2008, p. 253). Educational researchers strongly advocated for "a fusion of the western developmental theories, societal needs, and the cultural heritage" in creating a quality learning environment (Jambunathan & Caulfield, 2008, p. 257). However, Jambunathan and Caulfield further indicated that Indian early childhood teachers did not incorporate a lot of developmentally appropriate activities in the classroom. In Korea, early childhood teachers started to learn about DAP in the early 1990s and later DAP was adopted as the theoretical

base of their national kindergarten curriculum (Kim, Kim, & Maslak, 2005). Several studies using small convenient samples were conducted to determine teachers' understanding of DAP concepts as well as their application in mathematics and science teaching (Kim et al., 2005). Kim et al. suggested that Korean teachers' beliefs, regardless of their work settings, align with those of DAP, and their self-reports indicate that the activities they implement in their classrooms would be considered DAP. Further, Lee, Baik, and Charlesworth's (2006) study involving 242 kindergarten teachers in Korea suggested that professional development programs on the use of scaffolding skills or similar topics were more effective when delivered to teachers who embrace the philosophic base of DAP as compared to those who do not.

In China, the influence of DAP principles in early childhood education has resulted in continuous revisions to the national curriculum framework that guides preschool classroom practices. However, the adoption of DAP concepts in Chinese early childhood educational philosophies and practices is controversial and has generated heated debates in the field. Some Chinese scholars strongly advocate utilizing a developmentally appropriate approach in educating young children, while others propose the inappropriateness of integrating western philosophies and practices without carefully examining their cultural and contextual relevance. Jiang and Deng (2008) stressed that early childhood professionals must understand basic issues and specific phenomena in the Chinese sociocultural context in order to cultivate the special cultural attributes of Chinese pedagogy. Zhu and Zhang (2008) cautioned the integration of foreign curriculum and philosophies without careful examination of cultural relevance. For example, individualism, as valued by the DAP principles, represent opposite beliefs to collectivism, which is largely valued by traditional Chinese culture and is deeply rooted in Chinese teachers' educational philosophies and classroom practices. Chinese parents also raised concerns regarding child-initiated activities and a play-based approach to teaching young children, as most of them do not equate such methodologies with teaching, and claimed that schools who are integrating these approaches are not preparing their children for later academic achievement.

Even though the NAEYC DAP document provides the foundation for the government-mandated guidelines for preschool education, very few studies to date have been conducted in China to examine the relevance of implementation of developmentally appropriate instruction in the Chinese socio cultural context. It is crucial to investigate Chinese early childhood teachers' agreement with the philosophies and teaching practices described in the DAP to provide the foundation for the discussion of the cultural appropriateness of the DAP principles. Specifically, research needs to look at influences of important variables: the class size, teachers' level of education, and degree of exposure to the DAP according to the Chinese early childhood curriculum movement. Therefore, the following article provides an introduction to Chinese early childhood education, revisions to the curriculum framework resulting from the continuous integration of DAP philosophies and practices, descriptions of previous research on Chinese teachers' understanding and use of DAP, and variables that contribute to differences in teachers' DAP views. The following research question will guide the study: How do years of experience based upon national curriculum movement, level of education, and class type (kindergarten class vs. preschool class) influence Chinese preschool teachers' DAP views?

Preschool Education in China

Children in China ages three to six usually attend full-day preschool programs. It is important to mention that kindergarten classrooms for children ages five to six are affiliated with preschool programs in China, not elementary schools as is typical in the U.S. For the purpose of this article, preschool programs for children ages three to six include both kindergarten classes and preschool classes. Even though DAP guidelines apply to children birth through eight years of age, this study only applies to children from three to six who are enrolled in preschool programs. Preschool programs, including kindergarten year education, are non-compulsory, and parents are responsible for tuition, whether their children attend public or private preschools. Public preschools receive funding from the government at various levels and are generally considered to be of high quality (Zhu & Zhang, 2008). The class size in a Chinese

preschool is considerably larger than class size in the U.S. For instance, most kindergarten classrooms have an average of 35 to 40 students.

Besides large classes, the demand for improving the quality of early childhood education is growing in China because more children ages three to six are attending three-year early childhood programs, especially in rural China. In some states, the number of children receiving three-year early childhood education has exceeded 90%, such as the Zhejiang province (Zhu, 2009). The increasing enrollment rate can be explained by fast and steady economic growth, as well as Chinese parents' high expectations for child outcomes, mainly measured by academic success. As early as first grade, children learn to compete with each other in preparation for the college-entrance examination, which is viewed as the exam that determines your fate. Therefore, many Chinese parents prefer that preschool teachers stress basic academic skills to prepare their children for the college-entrance examination due to a highly competitive education system. Such parental expectations and the high-stakes testing pose serious challenges to the early childhood curriculum based on DAP. This is particularly problematic during the kindergarten year. Even though children are still in the preschool, kindergarten class teachers are required by the school district to implement 45-minute-long periods of direct instruction daily. Therefore, class type (preschool classes and kindergarten classes) in Chinese preschool indicates a difference in class size and curriculum emphasis, both of which are presumed to have influences on teachers' use of DAP practices.

Additionally, Chinese preschool teachers' level of education has risen significantly in the past decade (Hu & Szente, 2009). In fact, the majority of teachers have a two-to-three-year college degree in early childhood education. Also, the number of teachers who have bachelor's degrees in early childhood education continues to rise each year. However, it is not uncommon for some teachers who have taught for 20 years or more to have originally graduated from teachers' training schools (i.e., equivalent to a high school diploma). Teachers who now graduate from teachers' training schools are more likely to be teacher assistants instead of the teacher who leads instruction, and because of this, the number of teacher preparation schools at this level has been gradually

decreasing. It is anticipated that teachers who graduated from three-to-four year college programs are likely to be more familiar with the DAP principals than those who have lower levels of education.

Early Childhood Curriculum Movement in Contemporary China

Since the reform and open-up policy in 1978, western philosophies and approaches to pedagogy and curriculum have not only been introduced to early childhood practitioners in China but have also been systematically implemented in some settings. The Ministry of Education (MOE) in China, which is committed to enhancing the quality of preschool education, has also made continuous efforts to adopt and integrate DAP theories and practices into national early childhood regulations and curriculum, all of which marked the first early childhood curriculum movement since 1978 (Zhu & Zhang, 2008). As a result, Chinese kindergarten teachers were introduced to concepts that provide the foundation of DAP for the first time; however, there was a lack of guidance and policies to support teachers' efforts to integrate practices based on these concepts into daily teaching. In order to further promote this curriculum movement, the National Education Committee of the People's Republic of China (NEC) issued the *Kindergarten Work Regulations and Procedures* in 1989 as a trial version. As expected, the regulations and procedures emphasized child-centered teaching and the importance of play. This publication encouraged teachers to (1) provide opportunities for children to engage in self-initiated activities, (2) meet individual children's needs, including the inclusion of children with special needs, (3) provide time and materials for self-initiated play, (4) implement integrated curriculum development, and (5) emphasize the process rather than the end product of planned activities.

The issue of *Kindergarten Work Regulations and Procedures* (NEC, 1989) has legitimately enforced the adoption of DAP theories and practices at the national level. However, due to contextual differences in early childhood education programs between Chinese and Western cultures, teachers continued to question the practicality of the DAP practices while researchers raised validity concerns. For example, in a typical Chinese kindergarten, each child owns a box of crayons or

colored markers with his or her name written outside. The purpose of this is twofold: (1) organization and (2) the avoidance arguments between students in a classroom with 30 to 40 youngsters. In contrast, a classroom that emphasizes developmentally appropriate practices probably would mix all the crayons or markers together so children can practice social skills through sharing and negotiation. In order to address the gap between theory, practice, and curriculum, the Ministry of Education issued the latest document of *Guidelines for Kindergarten Education* (trial version) (Ministry of Education in People's Republic of China, 2001). The trial guidelines value age and individual appropriateness in curricula and provide teachers with a somewhat detailed framework describing appropriate practices in daily teaching. The quality of Chinese public early childhood programs are assessed by the evaluation of the program's fidelity to established curriculum guidelines (Hu & Szente, 2009). Because of this, the study of Chinese kindergarten teachers' agreement with, or lack of agreement with, principles of DAP instruction is essential to current efforts to create a national curriculum based on DAP. The influence of teachers' exposure to the DAP based on the curriculum movement marked by the initial reform and open-up (i.e., initial movement), enforcement of the *Kindergarten Work Regulations and Procedures* (i.e., second movement), and enforcement of the *Guidelines for Kindergarten Education* (trial version) (i.e., third movement) is worth investigating.

Research on Chinese Preschool Teachers' Perceptions toward DAP

The demand for improving the quality of early childhood education is growing in China (Pang, Liu, & Hu, 2008). The national curriculum movement, though generating controversy and causing heated debates, has been shaping policy makers', teacher education institutes', and early childhood teachers' beliefs and practices regarding early childhood education. Since the implementation of the *Guidelines for Kindergarten Education* (trial version) (Ministry of Education in People's Republic of China, 2001), very few studies have addressed Chinese teachers' understanding and use of DAP and its match with the Chinese sociocultural context. McMullen et al. (2005) measured teachers' beliefs and practices

in terms of their agreement with DAP recommended practices across five countries including China, Taiwan, Turkey, Korea, and the United States. The results suggested that Chinese preschool teachers scored not only the lowest among the five countries on both scales but also showed the lowest correlation between their beliefs and practices. The authors explained that, in China, although efforts to implement the *Kindergarten Work Regulations and Procedures* are being made, "the applications of new regulations are inconsistent" (McMullen et al., p. 461). The inconsistency indicates that Chinese preschool teachers are challenged by implementing DAP practices. Challenges could be due to (1) large class size with 20 to 40 children per class, (2) the influence of Confucius' teaching, which emphasizes collectivism instead of individualism, which is valued by the DAP principles, and (3) the overall educational level of early childhood teachers, which is lower than other countries in the study (McMullen et al., 2005).

Furthermore, Wang, Elicker, McMullen, and Mao (2008) compared Chinese and American preschool teachers' beliefs in curriculum and instructional practices using the same scales (i.e., Teachers Belief Scale and the Instructional Activity Scale). Results revealed that Chinese teachers' level of education, specialized training, school location, and class size make a statistically significant difference in their beliefs whereas only levels of education contributed to American teachers' curricula beliefs. Further results suggested that class size was the strongest predictor of Chinese teachers' belief scores. During interviews, Chinese teachers reported practical limitations in resources as the number one factor they consider when planning for an activity, whereas American teachers reported children's interests. Additionally, Chinese teachers reported government regulations as the most influential factor on their teaching, whereas American teachers reported children's characteristics.

Previous studies (e.g., McMullen et al., 2005; Wang et al., 2008) regarding Chinese kindergarten teachers' beliefs in DAP have not addressed the influence of teachers' exposure to the DAP based on the curriculum movement marked by the initial open-and-reform (i.e., initial movement), enforcement of the *Kindergarten Work Regulations and Procedures* (i.e., second movement), and enforcement of the *Guidelines*

for Kindergarten Education (trial version) (i.e., third movement). In other words, the difference in teachers' DAP beliefs could be influenced by their exposure to the third movement only (i.e., teachers who taught less than seven years), both the second and third movements (i.e., teachers who taught between seven and 19 years), and all three movements (i.e., teachers who taught more than 19 years). The purpose of this study is to measure the influence of years of DAP exposure based on curriculum movement, level of education, and class type in determining Chinese early childhood teachers' understanding and use of DAP practices.

Methods

Participants

Two hundred and seventy-six teachers from 12 public preschools in Beijing participated in this study. Table 1 illustrates demographic

Table 1
Teacher Demographics

Teacher Demographics	Percentage	Number
Bachelor's Degree	41.3%	114
Two to three-year college degrees	42.8%	118
Teachers' training schools	12.3%	34
High school diploma or equivalent	3.6%	10
Experience teaching young children		
More than 19 years	21.4%	59
Between 7 and 19	39.9%	110
Less than 7 years	36.2%	100
Class type		
Preschool classes	77.5%	214
Kindergarten classes	22.5%	62

N = 276

information about participating teachers, including their degree, years of teaching, and class type (preschool class vs. kindergarten class). Seventy seven percent of teachers majored in early childhood education, and 12.3% had a background in elementary education.

Instruments

The researcher chose the Questionnaire for Developmentally Appropriate Practice (Charlesworth et al., 1993) as the main instrument to use in the study because it was created in 1990 before cultural appropriateness was infused into the DAP. Chinese society is largely homogeneous, as over 90% of its population is Han Chinese. This instrument consists of two subscales: Teachers' Belief Scale (TBS) and the Instructional Activity Scale (IAS). The TBS contains 37 items regarding teacher beliefs, and the IAS contains 34 items regarding teachers' self-reported use of classroom activities. Both of the scales are measured by a five-point Likert scale from "Not Important at All" (1) to "Extremely Important" (5). Each item represents a statement of either developmentally appropriate or inappropriate beliefs. The five points of the IAS items also range from Never or Almost Never (1) to Very Often (5). Moderate reliability and validity results were consistently reported through two large sample studies (Charlesworth et al., 1991; 1993). Cronbach's alpha obtained from this study for TBS and the IAS are both 0.86, including developmentally appropriate beliefs (.86), developmentally inappropriate beliefs (.81), developmentally appropriate activities (.84), and developmentally inappropriate activities (.8).

Procedures/Data Analysis

Data used in this study was gathered as part of the Chinese early childhood inclusion initiative project supported by the government. Based on the plan, the surveys were distributed to 350 early childhood teachers representing 12 preschools in Beijing. This survey was given to the teachers when the first author visited each school for consultations and interviews. Most surveys were returned to the first author the same day, while some were mailed to her a few days later. The return rate was 79%. Data were entered into SPSS version 16 for statistical analysis.

Years of teaching experience, levels of education, and class type were independent variables used for data analysis. Years of teaching experience was divided into three categories based on the year that marked the inauguration of the DAP curriculum movement in Chinese early childhood education: less than seven years, between seven and 19 years, and more than 19 years. Level of education was divided into four categories: bachelor, associate, mid-tech, and high school. Class type was divided into two groups: preschool classes and kindergarten classes. The majority of public preschools mandate the implementation of a school readiness preparation curriculum in kindergarten classes, which was presumed to strongly impact teachers' use of DAP. To determine the difference among teachers' developmentally appropriate beliefs and activities, the researcher employed three Multivariate Analysis of Variance (MANOVA) procedures to assess years of teaching experience, level of education, and class type. Discriminant Analysis (DA) was conducted as follow-up procedures of the three MONOVA tests when significance was found.

Results

Three separate MANOVA procedures were used as primary data analysis in determining the differences in teachers' perceived training needs based on the following variables: highest level of education, years of teaching experience, and class type. The MANOVA results indicated statistically significant differences in developmentally appropriate beliefs and activities when examining teachers' years of experience ($F(8, 508) = 2.89$, $p < .01$) and class type ($F(4, 266) = 3.5$, $p < .01$). However, when examining teachers' level of education, the MANOVA results indicated no statistically significant difference ($F(16,721) = .851$, $p > .05$). The following section will report results from descriptive analysis and MANOVA and Discriminant Function Analysis based on years of teaching and class type.

Descriptive Analysis

The mean and standard deviation for developmentally appropriate beliefs and activities based on years of teaching experience and class

type is shown in Table 2. Overall, Chinese early childhood teachers demonstrated positive DAP beliefs ($M = 3.54$, SD =. 46), and activities ($M = 3.56$, SD = .54). The teachers reported high agreement with developmentally appropriate beliefs ($M = 4.06$, SD = .41) and neutral agreement with inappropriate beliefs ($M = 3.03$, SD = .5). Teachers reported less frequent use of inappropriate activities ($M = 3.18$, SD = 56) than developmentally appropriate activities ($M = 3.993$, SD = .52). Differences among groups based on years of teaching experience as well as class type are illustrated in Table 2.

Table 2
Means and Standard Deviations of Developmentally Appropriate Beliefs and Practices Scores

		Appropriate beliefs	Inappropriate beliefs	Appropriate activities	Inappropriate activities
Years of teaching	0–7	4.09 (.38)	3.09(.45)	3.83(.57)	3.23(.58)
	7–19	4.11 (.41)	3(.49)	4.02(.44)	3.13(.57)
	>19	3.95 (.36)	2.88(.44)	3.86(.61)	3.15(.5)
Class type	Preschool	4.02(.37)	3.04(.47)	3.93(.54)	3.13(.59)
	Kindergarten	4.15(.41)	2.96(.49)	3.92(.54)	3.25(.52)
Total		4.07 (.39)	3.01 (.47)	3.92 (.53)	3.17 (.56)

Note: Numbers in parentheses are standard deviations

Pearson correlation analysis was used to examine how self-reported beliefs (TBS score) relate to activities (IAS scores). The results showed that there is a statistically significant positive correlation between TBS scores and IAS scores ($r = .31$, $p < .01$, $n = 276$). Further, the correlation between appropriate belief and activities scales and inappropriate belief and activities scales was the same ($r = .281$, $p < .01$). Both correlations indicate small effect sizes.

MANOVA and Discriminant Function Analysis

   Years of Experience. When examining years of teaching experi-
ence, the MANOVA results showed that overall, there was a statistically
significant difference in teachers' developmentally appropriate beliefs
and activities ($F(8, 508) = 2.89$, $p < .01$). The differences among teach-
ers based on their years of teaching experience accounted for 5% of the
variance in the multivariate scores. A direct discriminant function analy-
sis was computed on developmentally appropriate beliefs, inappropriate
beliefs, appropriate activities, and inappropriate activities to measure
group membership. Teachers who taught less than seven years were cor-
rectly classified 43% of the time ($N = 86$), and teachers taught between
seven and 19 years were correctly classified 27% of the time
($N = 103$). The overall correct classification was 45%. A cross validation
of the results showed 41% of the cases turned out to be correctly classi-
fied, indicating a very small discrepancy between original classification.

   A review of the squared canonical correlations from the first
Discriminant Analysis suggested that Function 1 contributed to success-
ful classification, explaining 6% of the variation in group membership.
The result was statistically significant (Wilk's Lambda = .9,
Chi-square = 22.71, $p < .01$). Function 2 was also statistically significant
(Wilk's lambda = .96, Chi-square = 9.26, $p < .05$). Function 2 explained
an additional 3.9% of the variance in group membership. The standard-
ized canonical discriminative function weights suggested that develop-
mentally appropriate activities responses contributed to the discriminant
function (see Table 3). Structural coefficients were computed to assess
the individual contribution of developmentally appropriate and inappro-
priate beliefs and activities (Huberty, 1984). The structure coefficients
suggested that appropriate activities items accounted for 46% of Func-
tion 1 variance followed by developmentally inappropriate activities
items (10%) and developmentally inappropriate beliefs (10%). Develop-
mentally appropriate beliefs (1.8%) contributed least to Function 1. For
discriminant Function 2, developmentally appropriate beliefs displayed
most variance (65%), following by developmentally inappropriate
beliefs (54%), and developmentally appropriate activities (7%).

Table 3
Standardized Canonical Discriminant Function and Structure Matrix

	Years of teaching		Class type	Years of teaching		Class type
	1	2	1	1	2	1
B_DAP	.041	.685	.853	.133	.809	.655
B_DIP	.299	.622	-.657	-.316	.734	.39
A_DAP	1.011	.055	-.420	.675	.259	-.31
A_DIP	-.684	-.215	.626	-.318	.111	.016

Developmentally inappropriate activities contributed least (1.2%) to discriminative Function 2 (see Table 3).

Class Type. Statistical differences and practical group differences were also found when examining the effects of class type on teachers' developmentally appropriate beliefs and activities ($F(4, 266) = 3.5$, $p < .01$). The differences among teachers based on class type accounted for 6% of the variance in the multivariate scores. Kindergarten class teachers were correctly classified 65% percent of the time ($N = 150$), whereas preschool class teachers were correctly classified 36% of the time ($N = 81$). The overall correct classification was 65%. A cross validation of the results showed 62% of the cases turned out to be correctly classified, indicating a very small discrepancy between original classification. Discriminant Analysis results suggest that Function 1 explained 6% of the variation in group membership. The result was statistically significant (Wilk's Lamb = .94, Chi-square = 14.48, $p < .01$). The results for Function 2 were not statistically significant ($p > .05$). Therefore, no further statistics are reported based on Function 2 (see Table 3).

The standardized canonical discriminant function weights suggested that appropriate belief responses contributed robustly to the discriminant function (see Table 3). Furthermore, the structure coefficients suggested that appropriate belief accounted for most variance (42.9%) in discriminant function, following by inappropriate activities (15.2%) and inap-

propriate beliefs (10%). Developmentally appropriate activities contributed least in discriminant function analysis (.03%) (see Table 3).

Discussion

Overall, these Chinese preschool teachers describe DAP beliefs as being between "Fairly Important" and "Very Important." There are different patterns of results among the sub constructs of developmentally appropriate belief (M = 4.06, SD = .39) and inappropriate belief (M = 3.02, SD = .47). Chinese preschool teachers' self-reported descriptions of their implementation of developmentally appropriate activities fell between "Sometimes' and "Regularly" (M = 3.58). There is not a clear distinction shown between their responses to appropriate (M = 3.91) and inappropriate (M = 3.18) activities. In addition, Pearson Correlation Analysis showed a small statistically significant positive correlation (r = .31, p < .01, n = 312) between the TBS and IAS. This correlation was fairly low compared to correlations found among teachers from the U.S. (r = .68), Taiwan (r = .61, p< .01), Korea (r = .47), and Turkey (r = .47) in McMullen et al.'s study (2005). However, this correlation is identical to McMullen et al's finding (r = .31, p < .01, n = 276) about Chinese teachers. All the above findings indicate that Chinese early childhood teachers have difficulties in distinguishing appropriate and inappropriate beliefs and activities. Although teachers believe in DAP, they do not necessarily utilize DAP activities frequently.

In addition, this suggests that the DAP recommended practices do not match the context of Chinese early childhood programs. Chinese teachers' understanding of DAP practices are kept at a theoretical level because they would have to decontextualize themselves in order to implement some of the DAP recommended practices. Furthermore, Chinese teachers are more comfortable teaching in the way they were taught, which is through group and didactic instruction. Therefore, it is hard for Chinese teachers to "let go of students" and have them initiate play by making independent choices of material, centers, methods, and partners. Even during the period that is designed for free play, many Chinese teachers are likely to direct children's play in each center by limiting choices of play materials and methods. In a typical Chinese

preschool classroom, once children enter the classroom, they are ready to follow the teachers' directions in play and learning, rather than make their own choices and decisions regarding exploratory learning activities and interactions with materials, teachers, and peers. In other words, the constructivist approach to learning advocated by the DAP principles does not match with Chinese teachers' practical skills, even though teachers' philosophically agree with the DAP principles and recommended practices.

MANOVA results showed that when Chinese early childhood teachers' years of teaching experience varies, their understanding and use of DAP differs. A similar result was found when examining the effects of class type. Although partial eta square indicated small effect sizes, a number of reasons could contribute to the small effect size, such as a relatively small sample size and use of a nonrandomized sampling procedure. Discriminant function analysis further revealed that developmentally appropriate activity is the most robust variable in group membership when examining years of teaching experience, explaining 47.1% of the discriminant function variance. In other words, the difference among teachers who taught more than 19 years, between seven and 19 years, and less than seven years primarily resulted from their frequent utilization of developmentally appropriate activities. When examining class type, however, developmentally appropriate beliefs contributed most robustly to group membership, accounting for 49% in discriminant function. These results differed from Kim et al.'s (2005) findings in which responses to inappropriate activities survey items contributed most robustly to group membership when examining the effects of center type (kindergarten versus child care).

Years of DAP Exposure

In terms of mean differences for years of teaching experience, teachers who taught less than seven years reported most frequent utilization of inappropriate activities ($M = 3.2$) and the least frequent use of developmentally appropriate activities ($M = 3.8$). This implies that in spite of the fact that teachers with experience of less than seven years are most likely to have been exposed to DAP beliefs during teacher

preparation courses and professional development activities due to the implementation of the *Guidelines for Kindergarten Education* (trial version) (Ministry of Education in People's Republic of China, 2001), their teaching does not model DAP practices. This may be explained by the fact that as relatively young professionals, these teachers still struggle to manage the daily routines of a large class. Therefore, they tend to do what is easier based on their familiarity (e.g., group instruction or teacher directed activities) than what they believe is developmentally appropriate (free play or child-directed activities). This can be explained by that fact that Chinese early childhood teachers deeply value collectivism, and when faced with challenges in a classroom, the teacher relies more on underlying beliefs instead of new ideas of individualism as valued by the DAP principles. This also raises the issue of cultural mismatch between DAP principles and traditional beliefs. As a result, it warrants scholars to redefine developmentally appropriate practices in the Chinese sociocultural context, taking into consideration traditional early childhood educational beliefs and practices.

Teachers who taught between seven and 19 years showed the most frequent utilization of appropriate activities ($M = 4.02$), the least frequent utilization of inappropriate activities ($M = 3.84$), and the highest agreement with developmentally appropriate beliefs ($M = 4.1$). This indicates that the implementation of the Kindergarten Work Regulations and Procedures since 1989 has positively influenced Chinese early childhood teachers' developmentally appropriate beliefs and practices and they have a good understanding of DAP. Teachers in this year range seem to be the most proficient in practicing what they believe. In other words, their classroom behaviors are most likely to reflect their teaching beliefs. On the other hand, teachers who taught over 19 years and received professional preparation prior to the initiation of the curriculum movement reported the lowest agreement with developmentally appropriate beliefs ($M = 3.96$). Interestingly, they also reported the lowest agreement with developmentally inappropriate beliefs ($M = 2.89$). This indicates that they are aware of DAP as well as other teachers; however, they are least supportive of practices that reflect DAP

principles compared to others. This could be explained by the fact that these teachers have taught for the longest time and are openly disagreeing with the application of DAP in Chinese preschools believing that it would not work.

Class type

In terms of mean differences for class type, kindergarten class teachers reported the highest agreement with DAP appropriate beliefs ($M = 4.15$), lowest agreement with inappropriate beliefs ($M = 2.97$), most frequent utilization of developmentally appropriate activities (M = 3.91), but the highest use of developmentally inappropriate activities as well ($M = 3.25$). Preschool class teachers showed less agreement with developmentally appropriate beliefs; however, their developmentally appropriate activities scores ($M = 3.9$) are much closer to their developmentally appropriate beliefs scores ($M = 4.01$). First, descriptive data results suggest that a discrepancy exists between teachers' beliefs and activities regardless of kindergarten or preschool classes. Teachers experience difficulties in implementing developmentally appropriate activities that reflect their beliefs. Second, kindergarten class teachers are most likely to utilize both appropriate and inappropriate activities at the same time, even though they have the strongest belief in DAP. This could be explained by the fact that when children move to the kindergarten class (5-to 6-year-olds with class sizes of 35 students or more), teachers are mandated by either school or district curriculum guidelines to utilize long periods of whole group instruction to prepare children for grade school, which is primarily subject focused. Group instruction lasts at least 45 minutes, during which the children are expected to either listen quietly or complete activities alone. The amount of group instruction time is developmentally inappropriate for the age of the children; however, they are viewed as necessary since this is the type of instruction children will have to adjust upon moving into primary school.

Third, preschool class teachers showed a high agreement between appropriate beliefs ($M = 4.01$) and appropriate activities ($M = 3.9$). This indicates that without the mandatory requirement for grade school readiness preparation, as well as smaller class size, teachers are much less

pressured to prepare students for grade school and have more freedom to explore and implement activities based on their beliefs. This also indicates that in a communist country, the political influences on teachers' educational practices are so superior that teachers lack autonomy to develop curricula based on educational beliefs. Similarly, Wang et al. (2008) found that class size significantly influences TBS scores. Teachers who have a class size between 50 and 70 students were least likely to endorse child-initiated learning and integrated curricula compared to teachers with fewer than 50 students. Systematic constraints exist, such as the large class size in Chinese preschools, when implementing DAP practices. As a result, the appropriateness of DAP principles and practices, due to contextual differences between Chinese and U.S. preschools, warrant reconstruction of the ideas.

Conclusions and Implications

The purpose of this study was to investigate the cultural relevance of developmentally appropriate practices in China from the views of preschool teachers in Beijing. A total of 276 teachers from 12 preschools participated in this study. Based on the results from the descriptive statistics, Chinese early childhood teachers reported positive developmentally appropriate beliefs ($M = 3.61$, $SD = .36$) and activities ($M = 3.58$, $SD = .48$). Findings from this study supported the limited literature on early childhood teachers' understanding and use of DAP in Asia, including Wang et al.'s (2008) finding in Jiangsu, China, McMullen et al.'s (2005) similar findings in Taiwan, Kim et al.'s (2005) findings in Korea, and Jambunathan and Caulfield's (2008) findings in India. Though a different scale was used in Jambunathan and Caulfield's (2008) study, in general, all these findings suggested that a small proportion of early childhood teachers' regularly implement the use of developmentally appropriate activities.

Findings from this study helped to gain an in-depth understanding of Chinese early childhood teachers' beliefs and use of DAP influenced by the national curriculum movement. First, the early childhood educational system in China has been largely influenced by a hybrid of western, traditional, and communist cultures (Zhu & Zhang, 2008).

Exploring the cultural relevance of developmentally appropriate practices from the point of view of preschool teachers in Beijing

Chinese early childhood teachers share similarities with Korean teachers in their lack of "autonomy to develop curriculum and select instructional strategies to use in their classrooms" (Kim et al., 2005, p. 55). The strong influence of communist culture is reflected in the structure and routines of early childhood programs (e.g.s., schedules, preschool rules). Results from Wang et al.'s (2008) recent study further confirmed that government regulation is the most important factor in teachers' consideration of teaching. Although the influence of communist culture has been consistent, the discussion on the development of Chinese early childhood education is incomplete without examining the influence of western culture, which is reflected in the national curriculum movement. The impact of traditional culture is reflected in teaching styles, relationships with students in the classroom, parental expectations, and demands for academic focus. Teachers' decision-making processes with regard to curriculum and instruction are driven by the above three influences. As a result, Chinese early childhood teachers utilize developmentally appropriate and inappropriate practices simultaneously. Such influences also explain the gap between their appropriate beliefs and activities.

Second, teachers in different demographic groups showed different responses to DAP beliefs and activities. Teachers who had taught fewer than seven years as well as teachers who teach kindergarten classes reported the highest agreement with appropriate beliefs, yet used inappropriate activities most frequently. This could be explained by a lack of teaching experience as well as the demand for an academic focus in kindergarten classes. However, younger teachers are more familiar with educational philosophies as they are more likely to have been taught DAP in their teacher preparation programs. This explains why they scored highest in appropriate beliefs. Those teachers that teach preschool classes (fewer students compared to kindergarten classes) are least likely to use inappropriate activities. This echoes Wang et al.'s (2008) findings that the larger the class size, the less likely teachers will endorse child-initiated learning and integrated curricula. It also makes sense as kindergarten class teachers are regulated by the government to implement long periods of group instruction for primary school preparation so they have less freedom in implementing appropriate activities.

Third, the study results provide a base for evaluating whether DAP is culturally appropriate in the Chinese setting. Integrating western educational philosophies in Chinese early childhood curricula and practices warrants consideration of cultural influences and contextual differences. Indeed, a balance needs to be reached between resolving practical problems in the preschool within domestic sociocultural contexts and adopting foreign philosophies and curricula. Without keeping a balance, some trials of implementing western curricula that value DAP (i.e., Reggio Emilia and Montessori) might be unsuccessful in the Chinese sociocultural context. Such programs have already received criticism for lacking "China taste" by some Chinese scholars (Jiang & Deng, 2008). In addition, the underlying constructs of developmentally appropriate practices need to be redefined in the Chinese sociocultural context. For instance, how can the Chinese value of collectivism be reflected in DAP practices? This means that some practices such as teacher-lead group learning and activities are appropriate even though children are required to follow directions and cooperatively participate as a team. Other practices such as no talking during mealtime might also be culturally relevant. Furthermore, the Chinese education system needs to revisit its goals for preschool education, particularly for children in kindergarten classes whose teacher are pressured to prepare their students for standardized tests, which are considered developmentally inappropriate practices.

Finally, findings from this study provided many insights for implementing the national curriculum guidelines (trial version), which values DAP principles and practices. In general, this study suggests that teachers are supportive of educational philosophies of DAP which are emphasized in the new curriculum guideline constituting the ideological and practical structure for early childhood education in China. However, Chinese early childhood teachers experience challenges distinguishing between appropriate and inappropriate beliefs and activities. This shows a need for teaching appropriate beliefs and activities in professional development. For instance, a technical assistant can evaluate the classroom, provide specific feedback on teachers' use of DAP practices, and pinpoint improvements that can be made. Professional development also needs to model DAP in order to help teachers close the gap between

their beliefs and practices (Riley & Roach, 2006). Nevertheless, teachers' mixed use of both appropriate and inappropriate activities could reflect systematic constraints resulting from government regulations, including class size and the school readiness preparation mandate. This indicates a need for revision of regulations if following DAP guidelines is determined to be culturally relevant. Further, teachers need practical tools in implementing curriculum guidelines. Tools similar to *Early Childhood Environment Rating Scales–Revised* (ECERS-R) that have been validated in the Chinese context can be used by teachers in arranging classroom centers, selecting learning materials, and supporting children's initiatives in play in order to promote developmentally appropriateness practices (Hu & Szente, 2009).

This study presents some limitations. Participants represent the highest-level quality preschools in Beijing, China. Therefore, the results cannot be generalized to other cities, especially those less developed. Second, participating schools were all public preschools at the federal or city level; therefore, results cannot be applied to private preschools. Finally, participants of this study tend to have higher levels of education compared to early childhood teachers in other settings nationally. Thus, results can only be compared to teachers who have similar levels of education. Though these limitations exist, the structure of preschools is fairly unified throughout China. Therefore, the results suggest a good representation of early childhood teachers' appropriate beliefs and activities in China.

In conclusion, this study makes contributions to the growing body of literature about Chinese early childhood teachers' DAP beliefs and practices. For future research, studies on the application of DAP in preschools from different perspectives (e.g., parents and administrators) using different research methodologies are crucial to further identifying reasons for the gap between teachers' belief in and practice of DAP. Research methods utilizing the ECERS-R (Harms et al.,1998) to investigate the relationship between process quality of the early childhood program and teachers' beliefs and use of DAP are warranted to provide helpful insight in factors related to the gap. The assessment report generated from the ECERS-R rating can illustrate the discrepancy

between teachers' belief and practice in DAP, and thus provide practical guidelines regarding closing such gaps. Finally, methods for applying the latest revision of the DAP guidelines in the Chinese early childhood classrooms, which have always had an emphasis on school readiness, is worth investigating in order to enhance the development and academic performances of children in both China and the U.S.

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2

Open versus closed questions: What constitutes a good question?

Roberta Simnacher Pate

Abstract

This paper discusses both the advantages and disadvantages of open and closed-ended questions. Open-ended questions are defined as non-restrictive and having multiple correct answers. Closed ended questions are defined as restrictive and having only one correct answer. Some advantages of open-ended questions include self-expression and emotional revelation as thought-provoking experiences. These experiences, however, can sometimes be difficult to direct in the classroom setting. Closed-ended questions, on the other hand, are useful tools for retrieving learned information and for concise confirmation of facts. These questions however, limit the creative learning process and inhibit the student's inquiring nature. Research demonstrates that the most effective learning approach is to combine both types of questions to create a stimulating learning environment for students to gain knowledge.

Questioning has a long and revered history as an educational strategy. Throughout human history, people have asked, wondered, tried, and invented, through desire to find answers to questions. The Socratic method of using questions and answers to challenge assumptions, to expose contradictions, and lead to new knowledge and wisdom is an undeniably powerful teaching approach. Teaching is an art that consists largely of asking noteworthy, opportune questions that broaden students' minds and imaginations. Thus self-sufficient learners are born, rather

created, through this mental expansion, which facilitates their movement toward growth and understanding of the world around them and the decisions that are to be made. "Questioning is a teaching tool that can be used to help students discover the art of questioning as a learning tool and as a reading strategy" (Moss, 2002, p. 78). This, in turn, leads to the successful repertoire of meaning-making strategies used by readers. Moss continues, "Comprehension of a text is related to what the reader knows and what he or she wants to know; comprehension means asking questions and getting answers … reader-initiated questions shape the reading experience" (p. 63).

Questions initiated by the instructor, responded to by the student, and reflected upon among the peers create a literature-rich environment. Moss (2002) also notes that:

> Literary discussion as defined in this book reflects the dual nature of reader response. That is, on the one hand, reading literature is an *aesthetic* experience in which readers enter into a story and participate in it as a personal and emotional experience. In the words of Louise Rosenblatt, the 'aesthetic reading of a text is a unique creation, woven out of the inner life and thought of the reader' … reading literature is also a *learning* experience when readers *step back from the text* to reflect on their own responses and interpretations, explore layers of meaning, and study the craft of the storyteller, writer, and/or artist. (p. 62)

This leads the crafty instructor, initiator, and facilitator to manipulate the classroom environment into a self-generating reservoir of questioning skills. Students who are taught to ask questions instead of just answering questions are being equipped with the tools to becoming lifelong learners (Raphael, 1994). Ultimately, creating lifelong learners is a goal for any educator. The issue is to determine which type of question is effective in enhancing dialogue between teachers and readers and between readers and their peers. From among selections of the questioning styles, two predominant styles bear an interest in the field of education: open- and closed-ended questions.

Defining Open and Closed-Oriented Questions

Participants in every field generate numerous questions throughout the day whether it is in a classroom learning content material, literature dialogue, or even in daily settings at work or play. Questions happen daily, hourly, and rather incessantly outside the classroom, in the real world. Sometimes questions can be produced at the rate of one every two to three seconds. In school, these questions are generally low-level types usually directed to evaluate if students have remembered facts. These recall questions are known as closed or convergent questions. "A closed question normally has one correct answer that can be answered with either a single word or a short phrase" (Raphael, 1994, p. 117). Examples of closed questions include: 'What is your name?' and 'How many siblings do you have?' Questions that can be answered with a simple 'yes' or 'no' reply create a more limiting definition of what constitutes a closed question (Raphael, 1994). Examples include: 'Do you have any pets?' and 'Did you eat lunch?' "Closed questions may be referred to as 'check answer,' 'pre-coded,' or 'restricted'"(Vinten, 1995, pp. 27-32). Closed questions are also labeled 'skinny.' These questions do not require complex thought. They are usually used to recall infor-mation or assess stored data or knowledge gained after teaching. The ultimate goal of education should advance beyond this use of closed questioning style as its only means to assess the learners.

Open questions are not answered with a simple answer. Often there is more than one possible correct answer. These are high-level divergent questions that encourage the learner to contemplate and explore be-fore determining an answer. Open questions are purposeful and are the frame for a student-centered discussion. These higher cognitive ques-tions are defined as those that ask the student to mentally manipulate bits of information previously learned to create an answer or to support an answer with logically reasoned evidence. Also known as Socratic questions, these questions probe the underlying logic or structure of our thinking and enable us to make reasonable judgments. This in turn can stimulate inquiry and exploration. Open questions may also be referred to as "free-answer,' 'free response,' 'write-in,' or 'unrestricted' (Vinten, 1995). Open question stems begin with words such as "what," "why,"

"how," or "describe." Thus they become what some refer to as "fat" questions. Their purpose is to build up information, to allow for more personal responses, and to generate further discussions and questioning. Although any question can receive a long answer, open questions deliberately seek thoughtful answers and are the opposite of closed questions. Moss (2002) writes, "Open-ended questions can be introduced as an integral part of shared reading experiences to invite students to talk about their personal and emotional responses to the text and to articulate their own perspectives, interpretations, and opinions" (p. 63). Students are motivated to think and reflect, and they are provoked to provide opinions and feelings, which in turn leads to the students' own informed decisions (Vinten, 1995). Divergent questions have the universal feature of "requiring students to restructure information or apply knowledge in some way" (Marzano, 2001, p. 113).

Advantages of Open and Closed Questions

Closed questions have a respectable purpose within the field of education and among dialogues between readers of literature. Sometimes a quick assessment may be rendered to discern whether the learners understand a particular point, to review completed work, or to develop search skills. Often learners just need a bit of a 'shove' to get motivated into a dialogue or content subject; therefore, teachers can use closed questions to set up the initial stages of a reader's dialogue scenario (Raphael, 1994). According to Cotton (1988), lower-level or closed questions have the following advantages:

- Higher cognitive questions are not categorically better than lower cognitive questions in eliciting higher-level responses or in promoting learning gains.
- Lower cognitive questions are more effective than higher-level questions with young (primary level) children, particularly the disadvantaged.
- Lower cognitive questions are more effective when the teacher's purpose is to impart factual knowledge and assist students in committing this knowledge to memory (p. 5).

Students and teachers alike tend to appreciate closed questions in a testing format because the limited answer choices provide for an easy and quick solution. It requires less effort for the student to think, then answer without extensive writing; therefore, the students satisfy their desire to quickly move through the material. Similarly, they are easier for the teacher to analyze. Tests formatted in this style are easy for the teacher to process and assess the students' basic recital of knowledge. Group comparisons are easier to analyze with convergent questions, which are useful for testing specific hypotheses (Vinten, 1995). "It is clear that there are times when a teacher should use the closed form of a question [to just get the facts]. For example, consider the question 'What's the speed of light?' There is probably only one correct response in this situation" (Allen, 2002, p. 159). Therefore, closed questions do hold their purpose in the field of teaching and learning. However, closed questions could have the ability to lead into open questioning within opportunities for dialogue.

On the other hand, open-ended questions provide a number of learning circumstances. When a student is challenged to think and reflect on key ideas, a deeper exploratory thought is provoked. When a learner takes advantage of these higher thinking skills, long-term use may result in higher levels of knowledge retention. "Using a question stated in an open format allows for wider range of interaction, which reduces risk on the part of the student" (Allen, 2002, p. 159). Because of the wide range of possible responses and the fact that students are able to use their own words, open-ended questions, or divergent questions, are considered capable of "unearthing genuine attitudes and views" (Ventin, 1995, pp. 27-32). Therefore, these types of responses are considered more valid than responses from the most carefully constructed closed questions. With regard to questions' interaction with memorable learning, Marzano (2001) says, "'Higher level' questions produce deeper learning than 'lower level' questions" (p. 113). Open-ended, or divergent, questions promote open-mindedness and invite many answers or possibilities. During an exchange of dialogue, they can stimulate the exploration of concepts and ideas and facilitate creative and critical thinking processes. Individuality shines forth and enhances an astonishing

accomplishment of learning. These are the kinds of questions that challenge students and their thinking. "A question posed in the open format (1) allows students to have accountability for the authenticity of their responses, and (2) indicates there are several correct responses" (Allen, 2002, p. 159). "Evaluative questions move the reader away from the text, asking students to draw on their personal experiences" (Sandora, 1999, p. 182). Open-ended questions can reduce the amount of threat students perceive, trying to find that one single answer already known by the teacher, and increasing the probability that they will take part in the literature experienced discussion (Allen, 2002). Hence, learners are provided opportunities to develop as thinkers through participation within as well as outside the classroom. As one additional note, beyond the implications and results for the learner, creating open-ended questions is an easier process for the teacher than creating closed questions.

Disadvantages of Open and Closed Questions

"If you only ever use closed questions, then you are never going to encourage your learners to think" (Raphael, 1994, p. 114). Having only one correct response to the closed questions may be an advantage on one side of the coin, but this same property, or feature, also creates a disadvantage for the student. Within the environment of classroom discussions, when a teacher asks a closed question, students' mental activities begin a search for the one correct answer that the teacher has already deemed as acceptable. Therefore, trying to figure out what the teacher wants to hear may inhibit students from easily responding to the teacher, because they are now required to consider all possible answers before responding with the most relevant. According to Allen (2002), open-ended questions set in motion the following sequence of issues that a student must contemplate:

- Mentally generate several responses
- Evaluate which of these responses best fits the question
- Decide whether their response may or may not match the response the teacher has chosen as the correct one

- Risk participating in a game of right/wrong, when only the teacher knows the criteria for making the final decision (p. 158)

Therefore, closed-ended questions set boundaries to the responses students can offer, which significantly increases the students' risk and causes raised anxiety toward classroom participation. "Indeed, based on the perceived risk, such questions may inhibit students from interacting altogether" (Allen, 2002, p. 159). Aside from oral classroom endeavors, "It may be argued that the failings of closed questions are more likely to be due to omissions of an important choice category, which is of poor design, than to the use of the form in the first place" (Vinten, 1995, p. 27). Also, students tend to just take the best guess from among the choices available, or just guess without any thought at all, thus concealing the wide differences of context, attitude and personal background. Closed-ended, or convergent, questions in turn pose a disadvantage to the teacher as well. The construction of these types of questions in the development for a written assessment is more difficult and time consuming than their counterpart, open-ended, or divergent questions.

Open-ended questions bear some disadvantages. During classroom discussions, using open-ended questions can be scary for the teacher, as they seem to hand the baton of control over to the student. According to Sandora (1999), there is "evidence to suggest that the difficulty of carrying out discussions is a major roadblock: "… It is not because teachers do not know the elements of a discussion, but, more likely, that they have difficulty getting the elements operating" (p. 180). However, well-placed questions can leave the teacher in control as he or she steers the students' interest and engages them where he or she wants them. Another disadvantage or perceivable threat to the teacher is the lack of guidelines in evaluating responses. The analysis of a written response can be a difficult and slow process. This can be assisted with the development of a rubric; however, this tool could then possibly turn an open question back around to a closed question. Open-ended questions are generally contestable in that they leave us with more to think about and may not bring complete satisfaction.

Conclusion

According to Vinten (1995), the open-versus-closed question issue becomes a subset of what has been referred to as the "Qualitative-Quantitative opposition:"

This issue is a lively and enduring one, raising questions of the validity of each approach. Perhaps the biggest block to its resolution is a peculiar failure on the part of the research profession to find out to what extent group discussion and open-ended questioning do in fact provide us with counts that are accurate within the limits required for decision making. (p. 28)

With that need in mind, Allen (2002) comments:

The issue of open and closed formats has wide-reaching implications. While clearly not a consideration for all circumstances in the classroom, teachers would be wise to be aware of the potential effect the format of their questions can have on their audience. (p. 161)

In order for teachers to create a learning-centered dialogue between readers, they must be aware of the types of questioning skills that promote enhanced learning along with the positive balance in using the myriad of questioning styles. Lacking this awareness, frustration begins to rise between teacher and students when a teacher's goal of an empowered, learning-centered classroom is not being achieved. This optimum balance between questioning styles and careful wording in intent can encourage full classroom participation.

Glasgow (2003) refers to the research of Redfield & Rousseau (1981), that when teachers ask questions, most of them are at the lower level, or close-ended format. "When teachers ask a majority of low-level questions (e.g.s., identify, define, describe) student achievement does not reach levels as high as when students are asked mostly higher-level questions (e.g. predict, justify, evaluate)" (Glasgow, p. 74). The goal of today's educator is to get "students to respond in thoughtful and

meaningful ways to questions about texts they read" (Sandora, 1999, p. 181). Costa (2002) posits that:

> Careful, intentional, productive questioning is one of the most pow-
> erful tools a skillful teacher possesses. Engaging students by posing
> questions is a clear signal that you are "democratizing" knowledge in
> the room, which conveys that every student is capable of knowing …
> if a teacher poses questions to which the answers already are known,
> students try to guess what's in the teacher's head and search for confor-
> mity or agreement. But if neither the teacher nor the students know the
> answer, they can share sincere, collaborative inquiry as they search for
> solutions. (p. 34)

But Glasgow (2003) warns "even well thought-out questions can lose their significance if they are overused" (p. 77). "Too many questions can turn the enjoyment of literary exploration and discovery into the drudgery of meaningless drill" (Moss, 2002, p. 78). "In most classes above the primary grades, a combination of higher and lower cognitive questions is superior to exclusive use of one or the other" (Cotton, 1988, p. 5) "The following vignette by Holmes captures the levels of thinking at increasingly complex levels:

> *The Three-Story Intellect*. There are one-story intellects, two-story
> intellects, and three-story intellects with skylights. All fact collectors,
> who have no aim beyond their facts, are one-story men. Two-story men
> compare, reason, generalize, using the labors of the fact collectors as
> well as their own. Three-story men idealize, imagine, predict – their
> best illumination comes from above, through the skylight. (p. 4)

Holmes reminds us that all three levels of thinking are important. Teachers will want to design and pose questions that elicit all three levels of intellect" (Costa, 2000, pp. 36-37). As Cotton (1991) cites Freseman: "In both school settings and in the world outside of school, it is crucial for people to have 'skills in questioning, analyzing, compar-ing, contrasting, and evaluating so that [they] will not become addicted

to being told what to think and do'" (p. 11). "Open-ended questions with multiple responses or those that require reasons or conclusions will invite students to take intellectual risks and justify their answers" (Costa, 2001, p. 289). A good question is one that enhances and extends learning, so it is important to know about the different kinds and where they fit in the learning environment. Good questions need to take the learner beyond the recall of basic information and challenge. Meaningful questions breed more questions and the desire to find answers.

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Promoting reading engagement and comprehension for students with learning disabilities

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Abstract

The authors address the difficulties teachers face in helping students with learning disabilities achieve reading engagement and comprehension. Reading engagement is viewed in a broad context that includes motivation. A strategy to help general education teachers in inclusion classrooms, as well as special educators in pull-out classrooms, was developed and field-tested with eight 5th grade students who spent at least part of the school day in each of these settings. The procedure combined oral reading by the teacher, student illustration of the story, and small group discussion. The effectiveness of the strategy was informally evaluated by the two teachers, their two teacher assistants, and these authors. Increases were apparent in voluntary oral reading by students to other students, transfer of drawing activity to other lessons for which it was not required, and an elevated level of interest in the school library.

Teachers of students with learning disabilities face an array of challenges on a regular basis. One of the most daunting endeavors they encounter is helping students to achieve reading engagement and comprehension. This transcends the basic mechanical act of reading, and involves motivation in choosing to read for a variety of purposes, as well as understanding what is read within its proper context (Gunning, 2010; Walker-Dalhouse, Dalhouse, & Mitchell, 1997).

Guthrie, McGough, Bennett, and Rice (1996) noted that teachers should cultivate reading engagement as an essential part of instruction. One avenue to generate this motivation is to provide high interest activities (Smith, 2006). These activities are often created, and made possible, by student proclivities towards certain topics, tasks, and opportunities for social interaction (Graves, Juel, Graves, & Dewitz, 2011). High interest activities designed to promote thoughtful engagement are catalysts for motivation, increasing the chances that students will continue their reading behavior even after the immediate activity is completed (Applegate & Applegate, 2010, 2011).

Guthrie and Wigfield (2000) said that motivation is the link between frequent reading and reading achievement. Oral reading to the students, by the teacher, has been shown to promote vocabulary growth and enhance students' desire to read (Cunningham, 2005; Durkin, 1974, 1975; Kuerbitz & Walker, 1979). Explicit strategy instruction has also been shown to be effective for motivating struggling readers (Guthrie & Wigfield, 2000). Art is one area in which students can be taught explicit strategies for enhancing text comprehension (Gunning, 2010; Rich & Blake, 1994). In addition, small group discussion (3–5 students, including those with learning disabilities), has been confirmed by a number of studies to be an effective arrangement (Conway & Gow, 1988; Foorman & Torgeson, 2001; Polloway, Cronin, & Patton, 1986; Samuels & Miller, 1985). Gunning (2010) recommends structured situations that foster conversations among children. Students with learning disabilities who need help with language development are especially likely to benefit from oral interaction of any type.

With the preceding ideas in mind, a project was undertaken to facilitate reading engagement and comprehension of students with learning disabilities. The objective of the project was to create a confluence by combining three well-known strategies for promoting literate behavior, with the hope that each would enhance the other two and bring about a synergistic effect. The strategies were oral reading by the teacher, student illustration of the story, and small group discussion. The following paragraphs will provide a description of the participants and scenario in addition to an explanation and assessment of the procedure.

The project examined the effects of the strategy on students' reading engagement and comprehension. The project was carried out during the spring semester in a general education classroom participating in the inclusion concept, as well as in a pull-out classroom for students with learning disabilities. The eight student participants were all in 5th grade. All but one were boys. The students spent four hours a day in the general education classroom, with all four hours occurring in the morning. The remaining three hours of the school day took place in a pull-out classroom for students with learning disabilities. The 5th grade teacher in the general education classroom had eight years of experience. The teacher in the pull-out classroom had nine years of experience, five in special settings and four in general education classrooms. The teaching assistant, who was an integral, dynamic element of instructional delivery in both the general education and pull-out classrooms, had 12 years of experience. The teachers and teaching assistant referred to themselves as the "instructional team," a term that will henceforth be used to describe their collaborative efforts.

The intervention took place during spring semester, meaning that the instructional team and students had already worked together in the fall. As a result, a wealth of information was already at hand regarding the achievement and attitudes of these eight students. Changes in both of these areas, from fall to spring, will be discussed later in this chapter.

According to the instructional team, the fall semester had seen little success engaging the students in reading. This was evidenced by the results of an interest and attitude in reading inventory administered in the middle of the semester, as well as the instructional team's observations, notes, and anecdotal records. The I & A Inventory indicated that seven of the eight students had a low interest level in, as well as a strong dislike for, reading. The remaining student was ambivalent, although nothing in his records indicated that achievement levels in reading were significantly different than the very low levels of the other seven students.

The first of the three sub-strategies to be included in the confluence strategy, oral reading by the teacher, was implemented by changing the approach used during the fall semester. Before this intervention, the

general education teacher would escort the students to the library once a week, on Fridays. The students were required to check out at least one book. The teacher would choose one of the students' books and read orally to the class from this book until the next library trip. Records indicated that before the books were returned, some of the shorter ones were completed by the teachers, whereas none of the longer chapter books were completed. There was no oral reading to the students by the teacher in the pull out classroom.

The instructional team expressed exasperation at the students' lack of interest in checking out books, listening to the teacher read bits and pieces of the books, and reading in general. After extensive discussions that involved the librarian, they agreed that a new approach was needed. Starting with the spring semester, it was decided that the instructional team, in consultation with the librarian, would choose a chapter book to read aloud to the whole class. The general education teacher would read a little of the book every day until it is completed. The 30 minute period before lunch would be the specific time for this oral reading. A list of five books would be compiled, with the hope that all five will be read in their entirety before the end of the school year. The books chosen would be appropriate for the age range of the children (general education and the eight inclusion children alike) and would represent what the librarian considers to be good children's literature. The weekly library visits would continue in the same manner, as mandated by the school. For the remainder of the day, when the eight students attended class in the pull-out setting, the teacher and teaching assistant would engage them in planned, structured activities connecting to what had been taking place in the book. Specifically, student illustration of the story and small group discussion would be utilized to augment the oral reading by the teacher. This is further explicated in the following paragraphs.

The second strategy, student illustration of the story, was chosen as a result of observations made by the instructional team during the fall semester. In the pull-out setting, time had always been reserved for art activities. All eight students clearly enjoyed these opportunities to draw pictures, which were occasionally accompanied by a bit of art instruction, since the teacher had minored in art during her undergraduate

studies. Often, "drawing time," as it was called by the students, would lead down other pathways and provide what the teacher referred to as "accidental instruction."

As part of the procedure, it was decided that the eight students would be asked to draw pictures related to the book immediately after lunch when they go to the pull-out setting. This would be done every day, just like the oral reading. Since the oral reading by the general education teacher would have been completed just before lunch, the action in the book would still be fresh in the students' minds. Artwork involving the daily segment of the story, or anything having to do with the story, would be acceptable. Any form of artwork would be considered appropriate, that is, pencil/pen, crayon, or water colors (although this one is more time-consuming and messier).

The third strategy, small group discussion, was also chosen to be part of the confluence because of the observations made by the instructional team during the fall semester. The eight students appeared to work better when given the opportunity to operate in smaller groups. After the students were read to by the general education teacher, and after they engaged in an art activity of some type in the pull-out setting, they would be placed in small groups by the pull-out teacher and encouraged to discuss the book, the art activity, both, or whatever came to mind related to the story. As envisioned by all who planned the project, this last step provides the point of nexus where the three confluence strategies bring about multi-dimensional reading engagement and comprehension.

During the course of the semester, the plan was altered. For the first three weeks, the students exhibited discomfort with the changes in routine. The instructional team decided to reduce the implementation of the strategy to three times a week (MWF) rather than every day in the pull-out setting. The oral reading by the general education teacher continued daily. Over the next two weeks, the students began responding favorably, with requests to use the strategy every day. By the sixth week, the routine had established itself as a daily offering.

Once the activity became embedded in the students' schematic expectations, salient behavioral changes signaling an increase in reading engagement began to take place in both settings. The eight students

anticipated beginning the activity (both morning and afternoon), with a few occasionally rearranging their surroundings in preparation before the teacher even signaled that it was time to begin. In the general education classroom, requests were made by the eight students, along with many others, to make time for more "teacher story reading" (as one student called it) during the morning. During the course of the afternoon in the pull-out classroom, several student requests were made to skip other instructional tasks in favor of more "drawing time" and discussion.

The instructional team observed and recorded other behavioral changes reflected after the strategy was implemented and became a mainstay of the routine in the two classrooms. Three of the changes were deemed significant. The first of these involved students voluntarily reading short excerpts from a book to other students as they gathered at a table or sat together on the floor. Three of the eight students assumed the role of reader, at one time or another. The three students who read to the others exhibited slow, word-by-word reading, but were nonetheless successful in capturing the attention of the listeners. The manner in which the students read suggested that they were modeling the style the general education teacher had been using during the oral reading, for example, holding up a hand with palm open towards the listeners to give special emphasis to the given passage being read.

The second of the changes occurred when the instructional team noticed that several of the students were drawing pictures after activities that were not directly related to reading/language arts and did not include artwork as a recommended part of the lesson. Five of the eight students were observed exhibiting this behavior after math and/or science activities.

The last of the changes involved library behavior. All eight students were judged as being more engaged in the school library as the spring semester unfolded. The librarian reported that they gradually started to browse purposefully through the shelves of books. On several occasions, books that were examined carefully, and compared to other books, were checked out for the week. Frequently, the books that were checked out appeared in the two classrooms, with students electing to read during the times they were allowed to choose an activity, or when they had finished

another task early. Some of the books became the ones used when the three students referred to previously read to other students.

Another change, though not behavioral, was observed in the results of the IRIs administered at the beginning of the school year, the end of the fall semester, and the end of the school year. None of the students showed improvements from the beginning of the school year to the end of the fall semester, and five of the eight regressed. Three of the eight students did, however, register improvements in their IRI scores from the end of the fall semester (pre-strategy) to the end of the school year (post-strategy). These improvements were on the comprehension sections of the IRI. This is consistent with the notion of an increase in engaged reading activity resulting in comprehension gains.

Although the implementation of the confluence strategy, as well as observation of the results, were performed in an informal manner, it is clear by the examples given that changes took place in the literate behavior of these students with learning disabilities. Reading engagement was facilitated by approaching the act of reading from different directions and connecting it to other modes of expression, providing students with additional opportunities to embrace literate behavior. An outgrowth of the additional reading engagement was an increase in reading comprehension, as evidenced by overall group improvement on IRI performance. The instructional team, as well as these researchers, feels strongly that the strategy was a factor in the changes.

Promoting reading engagement for students with learning disabilities logically increases the chances that comprehension will occur, which in turn enhances the prospects for academic achievement. This motivates students to make connections between various reading assignments and serves as a catalyst for students choosing to read for a variety of purposes. This informal project demonstrated the possibilities which exist for confluencing effective strategies and obtaining a synergistic effect to facilitate the reading engagement and comprehension of learning disabled students, accompanied by the residual effect of an increase in literate behavior. Hopefully, the excitement and promise of these possibilities will precipitate additional efforts in this area.

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Lessons from the field: The need to incorporate caring organizational practices that enhance success (COPES)

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Abstract

Moving from an elementary school to a middle school is experienced by more than 88% of public school students as they begin the middle school 5th, 6th, or 7th grades. This time of transition evokes a wide variety of emotions, behaviors, and concerns for young adolescents, and this transition to middle school is marked by changes in educational expectations and practices (National Middle School Association, 2002). A well-designed transition plan can restore the strong sense of belonging that the entering middle school student once felt in elementary school. In this article, the authors examine various learning challenges that struggling students face in the transition to middle school, and describe Caring Organizational Practices that Enhance Success (COPES), a collection of campus-wide organizational strategies that can be used to enhance the achievement and success of typical 6th grade learning-challenged students.

As noted in research, and as observed from the authors' experiences as public and private school teachers and university professors, middle school administrators and teachers often feel that organization is the responsibility of the students (Boller, 2008). Researchers have also found

that as students move through the upper elementary grades, academic success is "dependent on the students' ability to plan their time, organize and prioritize information, separate main ideas from details, monitor their progress, and reflect on their work" (Meltzer, Pollica, & Barzillai, 2007, p. 166).

However, from the authors' experiences, many students lack the ability to handle these responsibilities well, especially during the early middle school years. In fact, describing recent research, Wigfield, Lutz, and Wagner (2005) noted that "the prefrontal cortex, which controls executive functioning, becomes fully mature during *late* [emphasis added] adolescence" (p. 113). Therefore, early middle school and even some high school students often struggle with organizational skills. This struggle interferes with the learning, not only of typical students, but also the learning of special education inclusion students, who may have problems with organizational behaviors, such as temporal-sequential disorganization and material-spatial disorganization, described, respectively, by McMullen, Shippen, & Dangel (2007) as "difficulty in allocating time, following schedules, meeting deadlines, and solving problems within the classroom … [and] trouble keeping track of possessions, maintaining notebooks, and arranging desks" (p. 75), all behaviors that become of critical importance during the transition to and through the end of the middle school years (Meltzer et al., 2007). Furthermore, Yuen (2007) noted that low-income underrepresented students are especially vulnerable to the middle school transition.

Several studies indicate that difficulty with cognitive abilities, organization, and self-regulation may spring from, or be associated with, other factors, as well. These factors may be (a) neuropsychological, such as executive dysfunction, attention and/or hyperactivity disorders, and early-onset depression; (b) physiological, such as the onset of puberty; (c) emotional, such as the stress of the transition to middle school; and (d) motivational, especially in struggling students (Castaneda et al., 2008; Denckla, 2007; Hill, 2002; McMullen et al., 2007; Packer & Pruitt, 2010; Wigfield et al., 2005). However, students with executive dysfunction and other learning challenges such as ADHD, as well

as typical students, benefit from an environment that has an organized structure for effective learning (Denckla, 2007; Meltzer et al., 2007).

Middle school research shows that caring teachers (Paciotti & Covington, 2007; Paciotti, 2006; 2004) and exemplary middle schools address "the distinctiveness of early adolescence with various in-structional and organizational features" (Hill, 2002, p. 18). Research further indicates that providing campus-wide organizational structures benefits students in the early transitional middle school years, as well as later middle school struggling students, rather than allowing differ-ent structures that vary from one individual class to another (Wigfield et al., 2005). Therefore, it is important for school administrators, as instructional leaders, to establish campus-wide *Caring Organizational Practices that Enhance Success* (COPES), especially as teachers in later middle school and secondary classes often do not communicate similar organizational strategies with each other, making it more difficult for students to be organized, as they have to learn different routines for each teacher (Boller, 2008). It is much more effective and easier on the student for structures to be the same across the campus, or at least across grade levels (Denckla, 2007). The National Middle School Associa-tion goes one step further and suggests that administrators, teachers and counselors should consider organizational structures such as team teach-ing that would ensure fewer teachers per student who have a deeper and more meaningful knowledge and understanding of each child and his/her needs (NMSA, 2002).

The authors' conceptualization of *Caring Organizational Practices that Enhance Success* (COPES) is that campus-wide strategies help stu-dents to be more effective and efficient learners, particularly during the upper elementary and early middle school years, in which organizational skills become critical for student success (Boller, 2008). COPES are examples of caring instructional practices on the part of the administra-tors and teachers (Paciotti & Covington, 2007). Campus-wide effective organizational practices such as COPES can lead to increased student learning for all students, and especially for students with Executive Dysfunction, ADHD, and other learning challenges. COPES are cat-egorized into "Teaching Strategies for Structure and Routine" that have

been derived from the authors' experiences and observations as classroom teachers, special education teachers, university site professors, and teacher education professors.

Teaching Strategies for Structure and Routine

Classroom Materials: Color Coding, Binders, and Portfolios

The transition to middle school comes with increased demands upon executive functions, which are highly context-dependent and "lie at the interface between the child and the environment" (Bernstein & Waber, 2007, p. 51). Therefore, since the environment is so important, strategies and structures must be put in place to help middle school students be successful, especially those who struggle with academics due to executive dysfunction.

Campus-wide color coding of materials may be useful for the successful implementation of COPES. All textbook covers and subject folders should be color coded. For example, in all grade levels, math folders and spiral notebooks could be red, and textbooks could be covered either in red craft paper or coded with a red dot on the spine of a generic book cover. English materials could be blue, and so forth for each subject. If, throughout the campus, a specific color stood for a specific subject, students would have an easier time finding and bringing their textbooks, notebooks, and folders to class. How often the authors have witnessed students who have brought the wrong materials from their lockers to the classroom! Campus-wide color coding would be a simple and cost-efficient way to help students manage their materials. Imagine how middle school passing periods could be shorter (and therefore less disruptive) if students from 6th-through 8th grades knew that red always meant math. Students often willingly engage in this type of self-monitoring because they recognize the value of participating and utilizing the concrete reinforcement (color/subject matching). The materials and processes used to implement self-monitoring are often easily accessible and available in the classroom. In addition, students who self-monitor require less monitoring from their teachers, who can then spend more time teaching (Ganz, 2008).

To help students manage their materials, handouts, and assignments, campus leaders should require either a three-ring binder with divider tabs with pockets to encompass all subjects or a 13-pocket portfolio to organize all subjects. In the authors' experiences, a 13-pocket portfolio with an attached elastic cord surrounding it is much preferable to a large binder. It weighs less and is easier for students to use than a large binder. Handouts will not require being hole-punched, and papers are easily placed in the portfolio. Each section has a tab that can be labeled just as a three-ring binder with dividers, and students can place and remove paper much more quickly than when using a binder. The process is quieter than the opening and closing of bulky binders, which are also easily bumped off desktops resulting in faulty binder rings, causing a mess and wasting instructional time. In the portfolio, a thin, color-coded spiral notebook can be placed in each section, eliminating the need for an additional pocket folder. If campus leaders choose to require a binder, it should include color-coded, hole-punched, and tabbed folders designed with pockets for each subject. The use of index dividers that includes pockets is helpful to keep loose papers together for each subject. In either a three-ring binder or a portfolio, a "take home" section could be assigned to hold homework, agendas, notes home, etc. either separately for each class or together for all classes and other sections could be assigned for "Take to School" or "Home Room" items, for completed assignments, notes from home, etc. A required pencil/supply bag could be placed in the binder or portfolio. In addition, if each teacher allowed an individual supply bag or box to be kept in each classroom, typical middle school "battles" would be eliminated for students who continually forget supplies, or students who use the lack of materials as an excuse to not complete assignments.

To use COPES effectively, prior to the first day of school, teachers would decide in which class or period the binder or portfolio will be organized. Then, those selected teachers help students organize the binder or portfolio. In this case, communication and common organization practices are critical to the success of this endeavor. Furthermore, scheduled time for binder or portfolio reorganization could be implemented on a rotating basis by content area or class period, so that no

content area or period would lose a disproportionate amount of time from instruction.

For continued effective management of classroom materials, a list of frequently needed materials might to be posted in a prominent place in all classrooms. Also, teachers might provide reminder sheets of materials needed for class to be placed in students' backpacks or taped to the inside door of lockers. Teachers could also include notices of needed supplies in student portfolios that are taken home at the end of each day.

Assignments and Time Management: Agendas and Calendars

Teachers must include student organizational skills when planning instruction through modeling the use of daily schedules, calendars, and agendas. Campuses should require, and teachers must teach students how to use calendars or agendas in which students record homework and assignment due dates. This is an excellent tool for communicating with caregivers, especially if caregivers are asked to initial the agenda every day. There are various ways that an agenda can be used. A system for writing and checking assignments could be implemented at the end of class. For example, the agenda could be part of the closure of the lesson. Or even better, students could record the homework, assignments, and due dates as they enter the classroom, enhancing the opportunity for all to be settled, seated and ready for instruction, and most importantly, eliminating the rush at the end of the class period. A completed agenda entry could be the "ticket" to leave class. Teachers could stand by the door, and as students pass through, agenda in hand, teachers could initial, stamp or simply glance for each completed entry. If the recording takes place at the beginning of the class period, students who have trouble writing would be given more time, and less pressure to complete the agenda with success. Teachers also could consider making a check of the agenda book count as a participation grade or give incentives for completed entries for the week or month.

In every classroom, assignments and notifications should be posted in the same area every day. Consistency is vital to establishing routines. White boards or chalk boards should be cleared for each class period, leaving a clean slate for each class. Teachers should plan with other

teachers on campus, so that tests and projects from several different teachers are not due on the same day. To help facilitate this type of communication, administrators could post a large, wipe-off monthly calendar in the workroom for teachers to schedule important assignments, tests, and project dates. A copy of the monthly calendar could be posted and kept updated in hallways, campus marquees, on the school's webpage, or kept in the each student's portfolio. Schools could innovatively utilize technology, such as students' phones, computers or a school "social networking" webpage to post assignments, due date, updates and reminders. For some students, social networking sites (SNS) such as Facebook and Twitter have become their principle means of communication. Some have installed these sites' mobile features into their phones so that they can constantly be in touch with their online networks. This growing influence demonstrates that the utilization of SNS can expand the dialogue to outside of the classroom or campus and build better communication channels with students (Harris, 2008). Harris additionally cites a recent study by the University of Minnesota that found that low-income students are just as technologically proficient as their counterparts and credit SNS for teaching them technology skills, as well as creativity, and providing exposure to diverse views.

In addition, teachers should have a consistent system and a place for turning in assignments that should be uniform throughout the campus. This could be as simple as having students place assignments in a bin by the door as soon as they walk into class to individual file baskets alphabetized by student or class period, or organized by content area.

The authors' experience and research indicate that middle schools that implement campus-wide organizational strategies such as COPES will reap results in student achievement as the students learn, through explicit modeling, the strategies for student organization. Typical early middle school students' organizational skills will be enhanced and older special needs students with executive dysfunction, ADHD and other learning challenges will be scaffolded to learn more effectively in today's inclusive classroom.

The transition year into middle school, whether it is fifth, sixth, or seventh grade, is one of the most difficult that many students make; it

is this transition that often leaves lasting scars (Campbell & Jacobson, 2008). Campbell and Jacobson further state that transitions of all kinds require us to seek out and navigate the same three components: safety, information, and connection.

Teachers and campus leaders who communicate and implement Caring Organizational Practices that Enhance Success (COPES) will provide the transitioning middle school student the safety of Caring teachers, the information and connections through Organizational Practices throughout the campus to Enhance the Success of the transitioning middle school student, providing the tools to cope and succeed, not just survive.

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4

Uncovering the many misconceptions of dyslexia

Deborah Culbertson

Abstract

Some schools accommodating for reading disability use interventions based on traditional beliefs and not necessarily best practice. Recent research dispels the continued use of faulty accommodations. Finding a definition for dyslexia helps determine the methods for intervention and accommodation. In content area classrooms, teachers can accommodate language deficit students with content strategies that reduce the reading task. When the class uses a social network of readers, the dyslexic student stays in the classroom and experiences joys of reading and learning with classmates. The inability to show what they know can have an effect on the affective domain of students. Professional development in the area of dyslexia can help educators understand dyslexia is a problem with reading and not of intelligence.

In 1986 the Texas state legislature enacted a law requiring school districts to implement processes and procedures to help dyslexic students. Texas is one of the few states that not only defines dyslexia outside of the federal special education laws, but also provides a book of information to guide schools in helping students who, despite good reading instruction, cannot learn to read. The Texas Dyslexia Program manual is a free downloadable guide for educators and parents. Despite the information available, some of the accommodations used by schools are based on faulty myths about the nature of dyslexia. Such accommo-

dations—including the use of overlays; bookmarks with a window for a phrase of text, and using enlarged print—are common in the schools. These types of accommodations imply that dyslexia is a visual problem. Perhaps these myths are based in history. Some of the latest research, prompted by the use of such accommodations, gives a clearer picture of what is not an appropriate accommodation for dyslexia. The interventions explained in this paper combine the use of small group intensive instruction with the accommodations of on-grade-level content. Details of the small group intervention are part of the Texas Dyslexia Program manual. Research into the attitudes of educators regarding dyslexia is included, as is a poignant essay from one individual about his school experience.

In 1877, Kussmaul pointed out that the word blindness is an isolated condition and may exist even though intellect and speech are not impaired (Duchan, 2008). Throughout the late 1800s, reading disability on the word level was a subject of study. Hinshelwood (1895) and Pringle-Morgan (1896) used terms such as "acquired word blindness," "congenital," "orally intelligent," and "unexpected." Hinshelwood proposed that if these students are screened and taught appropriately, they can learn to read; he also considered dyslexia to be processing deficiencies of the visual system (Snowling, 1996). Perhaps these ideas from the late 1800s are what educators base their dyslexia mythology on. Current research of the visual systems helps educators especially when looking at what accommodations can help students.

Dyslexia as a Visual Deficit

In the following three projects, researchers examine the possibility that dyslexia can be explained through impairment in the visual system and its interference with the nature of reading. One of the assumptions in a non-reader is that there is something wrong with the physiology of one's eyes that causes the problems with reading. Could dyslexia be physical and therefore corrected with glasses or surgery, with overlays, or with a larger print size?

Bednarek, Tarnowski, and Grabowska (2006) developed methods that permitted detection of subtle visual impairments and identified two

different aspects of visual performance: magnocellular channel processing and eye movement patterns. Research prompted by the claims that the use of colored overlays improves reading ability centers on the contrast sensitivity of the mangocellular and parvocellular system of the eyes. The mangocellular system detects achromatic sensitivity, and the parvocellular system detects higher contrasts (Bednarek, Tarnowski, & Grabowska, 2006). If the detection sequence is not in the correct timing, the words move on the paper, causing headaches, blurring, and nausea. The goal of the overlay is to change the contrast, thereby stabilizing the print so the student can read proficiently. In a variety of EEG assessments, brain imaging and psychophysical studies, dyslexics demonstrated visual deficits such as contrast sensitivity and motion detection. These deficits were attributed to a malfunction of the magnocellular channel, one of the main parallel systems of visual information transmission. Their research in the magnocellular channel malfunctions led to using some means to change the contrast of print and paper to correct timing malfunctions, which provides the basis for Meares-Irlen Syndrome (MIS).

Helen Irlen, the name behind the Meares-Irlen Syndrome, claimed her colored overlays were the answer to dyslexia in her book, *Reading through the Colors*. Marie Carbo also sold overlays as part of her plan for reading remediation. Meares-Irlen Syndrome (MIS) is characterized by symptoms of visual stress and visual perceptual distortions that are alleviated by using individually prescribed colored filters. Colored overlays (sheets of colored transparent plastic that are placed upon the page) are used to screen for the condition. A study by Kriss and Evans (2005) concluded that MIS is only little more common in dyslexia, but it is prevalent in the general population. MIS and dyslexia are separate, so the detection and treatment should be different. Certainly, the overlays are not an automatic accommodation for students with dyslexia.

The second research project centers on the way eyes move through text. When reading, the eyes move in saccades and fixations; reading (thinking) occurs in the fixations (Smith, 2004). Researchers looked at the eye movement patterns of non-readers to measure the saccades and fixations and the connection to reading ability. Bednarek, Tarnowski,

and Grabowska (2006) found dyslexic readers had impairments in their eye movement patterns. Investigations focusing on movements in dyslexics' eye movement pattern during both reading and non-reading tasks showed more saccades than normal subjects, their backward saccades are more frequent, and they performed unnecessary saccades to other lines. There is a controversy about whether the erratic eye movement patterns observed in dyslexics is due to reading difficulties and a necessity to re-read the text to understand its meaning, or whether it is a cause of reading problems, as incorrect eye movements may disturb the process of word recognition. Some data suggest that the erratic eye movement pattern may precede the reading difficulty. According to the results of the study, there is no agreement about the causative role of erratic eye movements in dyslexia. With bookmarks, students are limited to phrases they can see through the window of the bookmark. If the research does not show that erratic eye movements cause a reading problem, then the use of the bookmark is unfounded for the dyslexic reader.

A study by O'Brien, Mansfield, and Legge (2005) confirmed that rate-by-print size curves followed the same two-limbed shape for dyslexic and non-dyslexic readers. The researchers' hypothesized that in a coding deficit situation the print size could make a difference in learning to read. In the study, the dyslexic reader had a developmental lag in the need for larger print when reading; however, this lag did not account for the reading rate differences in the dyslexic and non-dyslexic groups. The development lag did not explain the dyslexia. Therefore, print size does not explain the deficit. Again, a common accommodation of enlarging the print is not a helpful accommodation for students with dyslexia.

Dyslexia as a Verbal Deficit

Another view is that dyslexia is a verbal deficit (Snowling, 1996). Kussmaul, Hinshelwood, and Pringle-Morgan's (1994) work with dyslexia is reflected in the current working definition of dyslexia, which is used by the International Dyslexia Association:

> Dyslexia is one of several distinct learning disabilities. It is a specific
> language-based disorder of constitutional origin characterized by dif-

ficulties in *single-word decoding and often unexpected in relation to age and other cognitive and academic abilities*; it is not the result of generalized developmental disability or sensory impairment. Dyslexia is manifested by variable difficulty with different forms of language, often including, in addition to problems with reading, a conspicuous problem with acquiring proficiency in writing and spelling.

Considering the definition from the International Dyslexia Association, dyslexia is a language-based disorder. If dyslexia is a language-based problem, the disability would also be a problem in languages other than English. Recent studies establish that language deficits exist.

Nergard-Nilseen's (2006) study shows the impact of psycholinguistic word decoding deficit in Norwegian. The effects of regularity, frequency, lexicality, and granularity on single word reading in Norwegian children with dyslexia and control children matched for age and reading level showed that reading impaired children have the same patterns of performance as younger children who were matched for reading level on most tasks except for the fact that they were worse at non-word reading (Nergard-Nilssen, 2006). In a Swedish study, there was a less dramatic decrease in surface dyslexics when the reading level comparison was utilized (Gustafson, 2001). A study from China in the reading difficulties in the Chinese language concludes, "dyslexia in Chinese can be caused by psycholinguistic impairments at multiple levels including orthographic, semantic (morphological), and phonological processing" (Wen & Weekes, 2003, p. 255). Results from these studies and others like them throughout the world's languages are provoking. "Our conceptualization of what reading is and how it is acquired will greatly influence how we define dyslexia, what we think causes problems in learning to read, and what we believe are the most effective intervention strategies for helping students to overcome persistent literacy learning difficulties" (Turner, 2010, p. 229). Finding a definition for dyslexia becomes paramount in determining the methods for intervention and accommodation.

Learning to Read

The reading community is divided, as leaders in reading write that the dyslexia problem has been exaggerated. In *Understanding Reading: A Psycholinguistic Analysis of Reading and Learning to Read,* Frank Smith (2004) writes that some people have trouble learning to read simply because it is not the right time for them to learn how to read. According to Smith, if we teach reading when the students are ready then they will not be faced with the confusion that can handicap their learning. Smith concludes that "reading print is as natural as reading faces" (p. 30). Ken Goodman (1967, 1976) explains reading as a psycholinguistic guessing game, where children utilize the information experience, oral language, and syntactic knowledge to read; the guessing and confirmations help kids become more accurate readers.

Children learn to read. For most children, learning to read is a natural phenomenon. Yet some do not learn to read even when exposed to good reading instruction. Parents work with their kids and teachers tutor students after class; why is it that with all the support some students receive, they simply do not learn to read? The concern that parents have for their children who struggle with reading can become combative. Julian G. Elliot (2006), who published the article entitled "Dyslexia: Diagnoses, Debates and Diatribes," in the journal *Education Canada,* experienced the tirade of poor readers and the parents of poor readers when he was erroneously quoted by the media as saying that dyslexia did not exist. Elliott's assertion about dyslexia is not that dyslexia is non-existent, but that the reading intervention of poor reading comprehension and dyslexia is not differentiated in schools. His quick correction of the media's misquote did not quell the anxious minds of parents.

According to Reid Lyon (1998), learning to read is not natural:

> Programmatic research over the past 35 years has not supported the view that reading development reflects a natural process—that children learn to read as they learn to speak, through natural exposure to a literate environment. Indeed, researchers have established that certain aspects of learning to read are highly unnatural. (p. 35)

What does research tell us that helps answer questions about children's inabilities to learn to read? Kassmaul, Hinselwood, and Morgan maintained meticulous notes regarding the problems that dyslexic readers experienced in the word reading and decoding. According to the definition used by the International Dyslexia Association and the National Institutes of Child Health and Human Development, children and adults with dyslexia have a phonological deficit causing problems in learning to read, in spelling, and in writing. This language deficit is neither in the working of the eyes nor in the density or complexity of the language. Although the term dyslexia remains debated, there is good evidence that unexpected reading problems in children are caused by language deficiencies within the phonological domain (Snowling, 1996). The question becomes how the deficit fits into the reading instruction. For educators, research translates into practice, praxis, and the intervention for dyslexia is based on both the definition of dyslexia and the understanding of the process of learning to read. To look at the reading instruction, we must look at what reading theorists say about learning to read.

Gough (1976) described the sequence of events of one second of reading. The procedure our body uses is lengthy and the process complex. Researchers such as Zamansky (1966), Stewart and James (1969), and Stewart and Gough (1970) timed simple recognition thresholds from familiar five-letter words, latency between presentation of a word and beginning of its pronunciation, and the length of time a reader takes given the string of letters in a word, respectively. Gough (1976) writes that the data shows one part of the story. Children do not read letter by letter, but they must be associated with meaning for the mental lexicon to create meaning, and the accomplishment of the task is the fundamental problem of reading. Gough (2004) furthered that if a child can link the spoken language in phonological information to the printed word, then the child becomes a reader; the combination of decoding and listening comprehension improves reading—a simple view of reading instruction. According to Sally Shaywitz (2004), in her book *Overcoming Dyslexia*, Noam Chomsky and Steven Pinker argue that spoken language is innate, and reading is not. Dyslexic children do not easily move from speaking to reading, because they have a problem moving from hearing the

sound to mapping the sound to making a word. "In dyslexic children a glitch within the language system – at the level of phonologic module – impairs the child's phonemic awareness and thus his ability to segment the spoken word into its underlying sounds" (Shaywitz, 2004, p. 37). So what can teachers do to remediate the reading difficulties of dyslexic students?

Reading Intervention

How does the information processing, bottom-up model, of Phil Gough's reading model impact teaching dyslexic students to read, spell, and write? Should instruction in the classroom go back to the phono-logic model of learning to read? According to Shaywitz (2004) and Reid Lyon, "the choice strategy for beginning readers is to decode letters to sounds in an increasingly complete and accurate manner" (Adams, 1990; Foreman et.al., 1998). Lyon's reading lens is that phonemically aware readers are good readers. In this sense, dyslexia intervention goes back to the ability to hear and work with the sounds of the language in tangent with letter-sound associations. Knowing the patterns in language help the dyslexic student learn the rules of the language. The intervention instruction maps our language. Instead of relying on the natural abilities of hearing the language nuances, interventionists set down the rules of the language and use those concrete rules in increasingly complex ways.

David Rumelhart (1977) discusses the information processing models and how the formalism of the model which includes the ortho-graphic, lexical, syntactic, and semantic components as a context for reading allows all the points in to be interactive. Rumelhart's interactive components work together along with story grammar and personal background knowledge to help readers comprehend text. When students do not understand a word, they look back into the text for cues to help them make sense of the reading instead of breaking down until it is possible to decode and understand an individual word.

What is the best intervention for dyslexia? According to the State of Texas, the best intervention means to adhere to the information-processing model of teaching reading; it is systematic, cumulative, and

systemic. All instruction in the Texas model of intervention is based on word and phonemic/grapho-phonemic skill building, as well as multi-sensory instruction in the way our language works.

Classroom Instruction

In the Texas dyslexia program, students diagnosed with dyslexia also have normal to above-average IQs. The IQ of the student diagnosed with dyslexia allows for the class placement in regular education with an additional class for dyslexia intervention. In 1877, Kussmaul pointed out that intellect and speech are not impaired (Duchan, 2008). Hence, teachers can follow methods and accommodations so that the students can continue their growth academically. Using a concept-building model of instruction, teachers carefully plan instruction that adds and builds to base concepts; this building is systematic. The students also receive accommodations for their weaknesses as they pertain to dyslexia. Because of the level of intervention needed for reading help, the reading intervention is separate from the regular classroom; the content instruction remains at the grade placement level of the student. The accommodations center on the student's individual weaknesses.

Students with dyslexia use all the same materials as their classmates with the exception of having a support in place for reading, such as books on tape, buddy-readers, or books with highlighted text.

If writing tasks are also problematic for students, the students will voice-record their writing and type them from the recording. Teachers can accept mind-maps of information they usually require in essay form. Teachers can modify their assignments to allow extra time for the student to correct spelling errors.

Testing can be the same as other students with some help with the reading. With the technology that is currently available, the students can complete the test using the recording capabilities on their phones and send the whole test back to the teacher over the phone. Students can test on voice recorders by listening to their teachers reading the questions, then recording their answers on a different recorder. The teacher can also give these students oral testing instead of written tests. Teachers can minimize reading tasks on tests by simply trading the columns on

multiple-choice tests so that the first column is the longer word group and the column that readers normally re-read is the shorter word group. This simple modification keeps students from re-reading the longer section, which is normally on the right hand side.

Some students need extra time in completing reading or writing assignments. Using modifications students can show what they know, since the student with dyslexia has intact reasoning; therefore, the phonologic weakness does not impair the intellectual abilities for comprehension (Shaywitz, 2004). Many techniques can help elevate the reading task and allow students to show what they know. The diversification of tasking is part of keeping all students involved.

According to Scarborough (2005), expressive language interacts with basic reading skills. In classroom instruction, the use of language and the social environment of the classroom is an advantage for students with dyslexia. One must always consider the social nature of learning.

James Gee (1998) describes theory and research where emphasis is off the individual and moving into the social and interactive practice of literacy, which is good news for the dyslexic student. Reading is in a social construct, which means the process of making meaning uses the reader's personal experiences and links readers together to make meaning from text. Therefore, dyslexic students and non-dyslexic student can group together to create meaning from text. Students who are slower to decode and read can, in the context of collaborative and social learning, interact and learn with the students in class. When the class uses a social network of readers, the dyslexic student stays in the classroom and experiences joys of reading and learning with their classmates.

As literary instruction moves away from the application of new criticism theories, where students are left alone to parse text, to a world of constructivism, students with dyslexia can participate with other students to bring meaning to text that is difficult for them to decode. Educators can use patterns in text and in culture to bring experiences to their students with dyslexic.

New literacy studies open more avenues for the student with dyslexia, because the theories offer a view that is socially and culturally sensitive, as well as bring into view a more broad definition of literacy.

The new constructs of literacy move beyond books to the rich literacy of the non-verbal intertwined with the verbal. For students with dyslexia, the view opens doors for information access.

How can educators help students with dyslexia? Researchers continue to study dyslexia and its cause, but the everyday reality is students with dyslexia must be able to compete with other students. Students with dyslexia have difficulty showing what they know because of their disability. The inability to show what they know can effect the affective domain of students. In a student survey conducted at a British university, we get an example of what students with dyslexia need in their later years and a glimpse of how reading problems can affect a student's self-image.

A questionnaire survey of 136 male students, 62 with dyslexia and 74 without dyslexia, from 17 British higher education institutions showed that students with dyslexia have difficulties in note-taking, organization of essays, and expressing ideas in writing. All of the skills are high-level language skills. The students reported that their difficulties begin in primary and continued into secondary school, although the pattern of these difficulties had changed over time. The accommodation they reported as being the most useful included additional time for examinations, access to dyslexia tutors, and support with information technology. The results of the survey and ensuing discussions conclude that the dyslexic students need such accommodations as oral examinations, tape-recorded answers, word processors, a reader-helper, colored overlays, extra time on tests, literacy based tutors, and copies of lecture notes. It is also interesting to note that the participants in the study claimed to have friends who would not come forward to receive assessment for dyslexia because of the stigma that dyslexic students lack intelligence (Mortimore & Crozier, 2006).

Research continues to present questions about the instructional needs of the dyslexic reader at all ages. The results of Marten's and DeJong's (2006) study of 10-year-old dyslexic readers support the contention that dyslexics continue to rely on sub-lexial reading, while older students need different instruction and different support. What instruction works best with these students? Educators must understand the

disorder enough to provide the supports that dyslexic students need.

In 2005, Wadlington and Wadlington developed a scale to measure the beliefs of educators. The purpose of their study was (a) to create and validate a scale measuring beliefs concerning dyslexia, (b) to use the scale to investigate the beliefs of educators concerning dyslexia, and (c) to recommend ways to better prepare educators to help students with dyslexia. Participants included university faculty, undergraduate and graduate students preparing to become administrators, counselors, elementary general education teachers, secondary general education teachers, speech therapists, and special education teachers, all from a southern regional university. Using the Dyslexia Belief Index (DBI), developed and validated by the researchers, it was found that the majority of participants held a significant number of misconceptions about dyslexia. Interestingly, elementary general education majors had significantly fewer misconceptions than the other groups. Because of this study, recommendations were made that include providing more opportunities to learn about dyslexia through such avenues as participating in a dyslexia simulation and observing/tutoring individuals with dyslexia. These findings illustrate the need for educators to have both formal and informal educational opportunities with individuals who have dyslexia (Wadlington & Wadlington, 2005). Professional development in the area of dyslexia can help educators understand the issue of reading is not one of intelligence, but one of decoding and speed.

While there continues to be a need for research in the area of dyslexia, attitudes about dyslexia and intervention for dyslexia are important to getting the help students need in order to progress with their education. Language and literacy can be used by society as power; to eliminate any part of the society from learning is to put those in a position of injustice. If information is not part the education of teachers, then our system of education produces a marginalized class of student and a marginalized class of teachers.

In Texas, the laws protect students from discrimination by educators who do not understand dyslexia. The education opportunities of the students dealing with dyslexia have some protection under Section 504 of the Civil Rights Code, which protects the student with dyslexia

from placement into a low-level class because of their reading disability. Schools bear the burden of educating and providing instruction for students with disabilities. With this protection, parents can advocate for their children and if they file and win a Section 504 case, and the school can lose federal funding for over a year and \ will have to decide how to provide for the student in the future. In professional development and seminars, lawyers who work with school law highlight the cases of students and schools in legal battles over intervention. Schools working with shrinking budgets have a difficult time providing the much-needed intervention for the small population of students with dyslexia.

In an essay written by David Raymond titled *On Being Seventeen, Bright, and Unable to Read*, he tells his story through a high school setting. He is junior in high school and reads on the 4th grade level. "I can't find the words to express how bad it really was. I wanted to die. I'd come home from school screaming, "I'm dumb, I'm dumb – I wish I were dead!" (p. 575). His essay is poignant and such a reflection of how school failed him. He wrote the story to let a teacher know that kids who cannot read are not dumb or lazy. "Maybe he just can't read and doesn't know what's wrong. Maybe he's scared, like I was" (p. 575). Raymond went on to college and graduated with honors with a B.A. in business management. His story is the story of many dyslexic students who are yelling out for recognition of their intelligence despite their inability to read.

Can the social building of reading skills help the dyslexic student? What are the implications of the new literacies for a dyslexic student? What we are beginning to understand is that students need educators to create dialogue between students, teachers, and researchers to provide appropriate delivery of classroom instruction.

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Not "if," but "why" and "how:" What already-motivated black female readers can teach us about adolescent literacy instruction

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Abstract

In this paper, we describe early findings from an ongoing mixed-methods study to examine the reading attitudes, dispositions, and motivations of 17 black middle school-aged adolescents, grades 6–8, participating in the Afro-centric summer literacy enrichment program, Children's Defense Fund Freedom Schools® (CDFFS). Current education policy discourses suggest that black adolescents are apathetic readers who are "at-risk" for low reading achievement. Our work aims to "talk back" to such discourses, and indeed, our findings show that many of the adolescents who participated in the summer program—especially 6th grade black females—place a high value on reading and read voluntarily outside of school. In this paper, we profile three of these 6th grade females to highlight the values they place on reading, the way they view themselves as readers, and their thoughts about school and other influences on their reading lives. We end with implications for adolescent reading instruction that can better serve the needs of already-motivated adolescent readers.

Introduction

In this paper, we describe early findings from an ongoing mixed-methods study to examine the reading attitudes, dispositions, and motivations of 17 black middle-school-aged adolescents, grades 6–8, participating in the Afro-centric summer literacy enrichment program, Children's Defense Fund *Freedom Schools®* (CDFFS). We seek to understand how the program participants see themselves as readers, what values they place on reading, and what kinds of texts they prefer to read outside of school. While important studies have reported on the reading dispositions and book preferences of predominantly white or Latino/a middle school students (e.g.s., Hughes-Hassell, 2007; Ivey & Broaddus, 1995; Worthy, Morman, & Turner, 1999), black primary and elementary students (Campbell, Griswold, & Smith, 1988; Williams, 2008; Zimer & Camp, 1974), or special needs students (Swartz & Hendricks, 2000), few studies have focused explicitly on the reading preferences, attitudes toward, and beliefs about reading held by black adolescents in upper grades. As Williams (2008) explains, "Black participants are an extremely under-represented sample in the literature review of book selection studies," and "A substantial research base does not appear to exist for educators to examine data patterns among children … who are black and from economically-disadvantaged backgrounds" (p. 52).

Yet, black and poor adolescents are continually vilified in current educational discourses as apathetic, reluctant non-readers and "at-risk" students who consistently fail to make gains in reading achievement as compared to their white peers. In this paper, we report findings that "talk back" to such discourses, providing evidence that adolescents—especially 6th grade black females—who participated in the reading-intensive summer program place a high value on reading and thus see reading as important in their lives.

After a brief theoretical and contextual overview of our research project, we share findings from the Adolescent Motivation to Read Profile (AMRP) (Pitcher et al., 2007) surveys we administered to and interviews we conducted with program participants in the summer of 2010 at a Freedom Schools site in a large city in the southeastern Appalachian region of the United States. We include profiles of three

6th grade females who participated in the Freedom Schools program to highlight the varying values they place on reading and how they view themselves as readers. We end with a discussion about the significance and implications of our findings.

Theoretical Framework

Our research draws on critical race theory (CRT), which itself draws from a broad literature base often termed "critical theory" and an earlier legal movement called "critical legal studies" (Ladson-Billings, 1999). One tenet of CRT is the challenge to dominant ideology, or traditional claims that educational institutions make and popular educational discourses iterate (Solórzano & Yosso, 2001). Popular educational claims and discourses our work disrupts are (1) students of color are "at risk" of reading failure; (2) students of color are apathetic readers who do not choose to read voluntarily, and (3) students of color are "culturally deprived" or "disadvantaged" in their out-of-school literacy experiences.

We hear much in the media about the reading "achievement gap" that exists between black and white students. NAEP score reports consistently reveal that whites outperform their non-white peers in reading achievement. But this discourse obscures the fact that schools and other educational institutions typically rely on narrow, limited definitions and assessments of reading and reading achievement (Groenke & Maples, 2009). Hall, Burns, and Edwards (2010) suggest that current school-based reading programs too often view literacy as an "autonomous set of skills" that adolescents must acquire and apply to be successful readers. When readers struggle in such programs, "it is assumed that they are either not trying hard enough or need additional skills-based instruction" (p. 8). Hall, Burns, and Edwards further that "As a result [of such instruction], the autonomous model of literacy … sets the stage for many students to fail through no fault of their own" (p. 8).

And, as Spears-Bunton and Powell (2009) suggest, such definitions and assessments of literacy are often biased toward "mainstream styles of speaking, writing and behaving" (p. 7), and students with different cultural practices, experiences, and literacies are often considered "non-literate."

The "achievement gap" discourse also obscures other legitimate factors that influence literacy achievement, such as the very real differences among adolescents' text preferences, readiness levels, and dispositions toward reading. Reading researchers have long suggested that what adolescents like to read cannot be found in school (cf. Worthy, Morman, & Turner, 1999). Valencia and Buly (2004) also explain adolescents do poorly on standardized reading tests for a variety of reasons that can range from poor word identification abilities and slow reading rates to fluent reading without comprehension. Reading researchers suggest that to address such range in reading preferences, abilities, and thusly student needs, teachers should provide classroom access to books that adolescents can read with success and more multilevel, flexible, small-group reading instruction tailored to the needs of individual students (cf. Allington, 2001; Dudley-Marling & Paugh, 2004; Groenke & Scherff, 2010).

Still another factor obscured by the "achievement gap" discourse is the role family income plays in access to books and other print materials. It comes as no surprise to us that two of the three 6th grade females we profile in this paper—all who had the highest scores on the AMRP profile—lived in households with incomes above the national median (we did not have household income data for third participant). The highest-scoring female, Carrie Johnson (all names are pseudonyms), described having access to a variety of texts and text sources outside of school, including magazine subscriptions and a personal computer.

Yet these adolescents attend schools where poverty rates are high. We know that more than 60% of black students attend schools where more than 50% of the school population is identified as living in poverty, compared with 18% of white students (Orfield & Lee, 2005). These schools are most vulnerable to the mandates of the No Child Left Behind Act of 2001 (NCLB), which has been criticized for its narrow, restrictive, and punitive views of reading achievement and assessment (Groenke & Hatch, 2009; Groenke, 2010).

In addition, we know that in high schools where at least 75% of the students are low income, there are three times as many uncertified or out-of-field teachers teaching core subjects than in schools with wealthi-

er populations (Department of Education, National Center for Education Statistics, 2004). Perhaps this is why Darling-Hammond (2009/2010) calls the "achievement gap" an "opportunity gap" in educational resources (e.g., school funding, equitable distribution of school resources) (p. 8) and explains that many of the sources of problems in failing schools must be viewed in structural and systemic terms, rather than in individual students or sub-groups of students.

The descriptions of young black readers provided in this study serve as testament to the need for challenges to dominant "deficit" and "meritocratic" ideologies prevalent in educational discourse on reading achievement in general, and black youths' engagement with reading and literacy in particular. The descriptions also serve as testament to the need for educational policy-makers and teachers to broaden their views of literacy and consider alternative methods to one-size-fits-all reading instruction that are more attuned to the specific, individualized needs of all adolescent readers.

Context of Study

The research described in this paper was conducted at a CDFFS site in the summer of 2010. Inspired by the Mississippi Freedom Summer of 1964, a project emanating from the Civil Rights Movement to prepare poor and disenfranchised African Americans to become active, voting citizens, the current-day CDFFS program works to secure "a healthy start, a head start, a fair start, a safe start, and a moral start for all the children of America who cannot vote, lobby or speak for themselves" (Children's Defense Fund, 2010). The CDFFS pays particular attention to the needs of poor and minority children and those with disabilities. As stated in CDF literature:

> Education is the precondition for survival and achievement in America today, yet every second a public school student is suspended, and every 11 seconds a high school student drops out … investing in children is not a luxury or choice—it is a national necessity and a top priority. We must demand that all children are provided a quality education and safe

and loving places to go after school and during the summer.
(Children's Defense Fund, 2010)

The CDF was founded by Marian Wright Edelman in 1973 as a
result of the Washington Research Project, a public interest law firm
begun in 1969 that monitored federal programs for low-income families.
In 1993, the CDFFS program began to take shape via the Black Com-
munity Crusade for Children (BCCC). The program's core mission was
to provide summer enrichment that helped children fall in love with
reading, increase their self-esteem, and generate more positive attitudes
toward learning. In 1994, there were 18 sites across the nation serving
1,600 children. In 2009, there were CDFFS programs in 134 cities
serving over 9,000 children.

The main goal of the CDFSS summer program is to help youth "fall
in love with books" and experience an "overwhelming *desire* to read"
(Children's Defense Fund, 2010). The program runs six weeks, from
mid-June through July. Program participants read for several hours each
day. The CDFFS puts high-quality, multicultural literature at the heart of
its curriculum and gives attention to traditional means of black story-
telling and important themes in African/African-American lived and
historic experiences (Jackson & Boutte, 2009; Groenke, Venable, Hill,
Bennett, in press).

The summer of 2010 was the first time a CDFFS program had been
hosted in this urban community. Stephanie Hill served as the program's
site director, while Susan and Ann served as university/community-
based researchers. We wanted to know what kinds of readers partici-
pated in an Afro-centric summer literacy enrichment program. Thus, our
research questions were:

- What value(s) do black middle school-aged adolescents partici-
  pating in an Afro-centric summer literacy enrichment program
  place on reading? For what purposes do they read?
- How do black middle school-aged adolescents participating in
  an Afro-centric summer literacy enrichment program see them-
  selves as readers?

- What do these black adolescents choose to read voluntarily, for pleasure, outside of school?

Research Methods

To address these research questions, we employed the Adolescent Motivation to Read Profile (ARMP) developed by Pitcher et al. (2007). Underlying this survey instrument is Guthrie and Wigfield's (1997) definition of motivation as "the beliefs, values, needs, and goals that individuals have" (p. 5). Whether or not adolescents see reading as a valuable pursuit is an important factor in considering adolescent motivation-to-read. As Pitcher et al. (2007) explain, "The closer that literacy activities and tasks match [a student's] values, needs, and goals, the greater the likelihood that students will expend effort and sustain interest in them" (p. 378).

Another important factor in adolescent motivation-to-read is self-concept (or self-efficacy), which we understand to be comprised of how adolescents perceive themselves as readers, how they think others perceive them as readers, and how well they believe they can accomplish a given task or activity (Bandura, 1977). Wigfield (1997) suggests reader self-concept works recursively with reading value; when a student experiences success with a reading task, the student begins to value reading more highly, and thus becomes more intrinsically motivated to succeed. Strommen and Mates (2004) explain that adolescents who read a lot on their own tend to be confident, intrinsically motivated readers who do not need teacher or peer-group approval (Strommen & Mates, 2004).

Conversely, as Pitcher et al., (2007) explain, "When … students judge reading and literacy activities to be unrewarding, too difficult, or not worth the effort … they can become *nonreaders* or *alliterate* [readers] who are capable of reading but choose not to do so" (p. 379). Too, as reading researchers suggest, adolescents are often aware of their "perceived status in classrooms" (Hall, Burns, & Edwards, 2010, p. 1) and will disengage with reading tasks that ignore the social and cultural "funds of knowledge" they bring to the classroom (Moll & Gonzales, 2001).

In addition, reading researchers suggest adolescent motivation-to-read increases when adolescents have access to books they want to (and can) read and have opportunities to choose what they read (Allington, 2001; Groenke & Scherff, 2010). Opportunities to choose texts diminish, however, as adolescents travel through the upper grades.

Many complex factors, then, must be considered when determining adolescent motivation-to-read. To gauge these multiple factors—the value adolescents place on reading, adolescents' concepts about themselves as readers, and other motivational influences such as in- and out-of-school experiences—the AMRP includes two instruments: a reading survey and a conversational interview. The reading survey consists of 20 items using a four-point scale assessing *self-concept* as a reader (10 items) and *value* of reading (10 items). The conversational, semi-structured interview consists of 14 questions that assess what kinds of books adolescents find interesting, how adolescents find reading materials, and what adolescents read at home and school. The questions are open-ended to encourage free response. The interview provides for more in-depth understanding and authentic insights on students' reading experiences, both in- and outside-of-school, their attitudes, and their motivations.

We administered the AMRP reading survey and conversational interview in June 2010 to 17 Level III (grades 6–8) participants at a community youth center that served as the site for the CDFFS summer program. Of the 17 students who participated in this research, 88% ($n = 15$) identified themselves as African-American, and 12% ($n = 2$) identified themselves as "multiracial."

Survey data were scored following guidelines outlined by Pitcher et al. (2007). An independent group t-test determining the difference between the means of nominal variables was then conducted on the survey data. This approach was deemed more appropriate due to the small sample size ($n = 17$). Separate tests were conducted on each assessment of the survey, as well as the full survey score. We assumed an equal variance among the population. The *p*-values reported are for a two-tailed test, assuming the absolute value of *t*. The most interesting findings of these tests occurred with gender and grade level variables.

The researchers used Transana, an open source transcription software program, to transcribe the 17 interviews. Researchers read the transcripts multiple times. When the decision to focus solely on the highest-scoring 6th grade female participants was made (based on quantitative survey results), we decided to look for the following information in the interview data: 1) reasons the adolescents give for reading/what value they seem to place on reading; 2) what the adolescents say about their abilities as readers, and 3) what texts the adolescents mention reading outside-of-school, what the adolescents say about where they get books, and who influences them to read.

Survey and Interview Findings

The AMRP Survey

The average survey score was 60 (out of a possible 80 points), or 72%. Overall, self-concept scores were somewhat lower than value scores, indicating the adolescents placed a higher value on reading even if they were less confident in their reading abilities. Indeed, 70% ($n = 12$) of the adolescents indicated that knowing how to read well is "very important," and 30% ($n = 5$) indicated they think it is "important." None of the participants indicated that knowing how to read well was unimportant.

The first t-test was conducted to determine the effects of gender on the AMRP survey results. While all three tests yielded significant results, gender had the greatest effect on the full survey score. Females, on average, scored 11.07 ($t(15) = 1.79$, p < .10) and 11.55 ($t(15) = 1.86$, $p < .10$) percentage points higher on the self-concept and value components of the AMRP survey, respectively. Moreover, females also scored 10.89 ($t(15) = 2.70$, $p < .05$) percentage points higher on the overall survey. Pitcher et al. (2007) reported similar results.

The second t-test focused on the grade levels of the participants. The greatest magnitude of effect was found in the value scores of the 6th and 7th graders. Beginning with the 6th graders, it was found that these participants scored, on average, 13.22 ($t(15) = 2.72$, $p < .05$) percentage points higher than the participants in 7th and 8th grade on the value

aspect of the AMRP survey. On the other hand, 7th graders scored 13.16 (t(15) = 2.70, $p < .05$) percentage points lower than the 6th and 8th grade participants. No statistically significant results were produced from the 8th grade data.

These results indicate that the 6th grade female participants in the CDFFS summer program place a high value on reading and see it as important in their lives. In what follows, we profile three 6th grade females, all of whom had the highest overall survey scores. In creating these profiles, we have considered individual responses to survey items for these three participants, and drawn on their interview data to create a more complete portrait of each adolescent female as a reader. Each profile is organized as follows: 1) our perceptions about why the adolescents read and what value(s) they place on reading; 2) our perceptions about each adolescent's self-concept as a reader, and 3) descriptions of motivational influences for reading they describe (e.g., texts they described reading outside-of-school, descriptions of reading at school, role of teachers, access to books, etc.).

The AMRP Interview

Carrie Johnson.
Value placed on reading. The highest-scoring overall program participant was a 6th grade female, Carrie Johnson. Carrie scored 71 of 80, or 88.75% on the AMRP. Carrie scored 34/40 (85%) on value items. On the value survey items, Carrie indicated that knowing how to read is "very important" and indicated that, as an adult, she will spend "a lot of time reading." In the interview, Carrie described a personal purpose for reading: "I like the whole thrill of reading. It can take you to another place … Like, if you're having a bad day, you can read a book, and it will take you to that place. Like you can imagine going there."

However, Carrie also seemed to place a social value on reading. Reading researchers (cf. Strommen & Mates, 2004) have posited that adolescents who read voluntarily and for pleasure often share reading materials with family members. Indeed, Carrie described what sounded like a rich literate home life, where her whole family shared magazines

with each other. She said, "Some of the magazines that come to our mailbox will say our last name, and that's how we know we have to share it … I have to take it to the living room and leave it on the coffee table for everybody. Or it'll just say our own names and that's how we know it's ours … then I can take it to my room." Carrie went on to explain how she often shared information from her magazines with the family: "I always find like one article that I like and I'll cut it out and post it on the refrigerator for them to see."

Reader self-concept. Unlike the other two high-scoring 6th grade females we profile next, Carrie scored higher on self-concept items than she did value items. She scored 37/40 (92.5%) on self-concept items and indicated on the survey that she sees herself as a "very good reader" (as opposed to "poor," "OK," or "good") and feels she reads "a lot better than my friends." She also indicated that reading is "very easy for me," and reading a book is something she likes to do "often."

Carrie's confidence as a reader was confirmed by the interview data. Carrie could name a favorite author—Sharon Creech, author of numerous, award-winning books for young people—and a favorite book, Mildred P. Taylor's young adult novel, *Roll of Thunder, Hear My Cry*. Both Sharon Creech and Mildred Taylor write historical fiction for young people, and Carrie also explained how she preferred this genre over other genres. When asked why she liked books by Sharon Creech, Carrie responded, "Her books kind of remind me of just like, real stories, like how a real life would be. Not like anything fantasy." She furthered that, "I like to read about the eighteen hundreds, because I can learn about the Civil War and slavery and different things like that."

That Carrie was a self-confident reader (at least with certain kinds of texts) also seemed apparent in her lack of need for peer approval of her reading habits (Strommen & Mates, 2004). When asked if she shared books or other reading materials with her friends, Carrie responded that "My friends don't really like to read." She explained that she tried to "tell them about good books to read so they can get AR [Accelerated Reader] points … but they don't like to read, so it doesn't really help." She said this makes her sad, because "I always tell them that reading will help you later in life."

Carrie seemed less confident in her abilities in academic reading, especially in other content areas outside of language arts (e.g., social studies, math). She said that she found school reading to be most difficult for her in science class, explaining "It's kind of hard to understand. I can't comprehend everything about science … like, when we're supposed to do experiments, [the teacher] will give us a science book and we're supposed to read it and understand it. But I have to see it to understand it." She went on to explain that her math teacher "writes [out problems] on the board instead of actually reading to us. And I think it's easier when I can see it."

Other motivational influences. Central to Carrie's access to books and book selections was the school library and teacher recommendation. Carrie explained that she found most of the books she read at the school library, using a grade-level booklist as a guide. She explained she reads "all the way up to twelfth grade" on the book list. When asked if there was a book she wanted to read, she mentioned *The Hunchback of Notre Dame* and said a teacher had recommended it on a classroom blog site. When asked what she liked to do at school, she said she enjoyed "free reading books from the library."

Carrie also mentioned in the interview that she read a variety of magazines for which she had subscriptions, including *Time* and *Girls' Life*, and described reading online for information about taking care of her pet rabbit. She said that she looked for information on "what food is better to have, and different toys I could give it." She explained that she had learned "how to tell a female rabbit from a male rabbit" and "what types of fruits rabbits can eat." Finally, while Carrie explained she didn't have a MySpace or Facebook page because "it doesn't feel safe to me," she did say she sends and receives around 35 text messages a day to her friends.

Carrie's mother also seemed influential in fostering Carrie's development as a reader, as Carrie would turn to her for help when she didn't understand what she read. Carrie also mentioned "life lessons" that her mother taught her, like "Always think first."

Deanna Carter.

Value placed on reading. Another high-scoring program participant was 6th grade female, Deanna Carter. Deanna scored 68 of 80, or 85% on the AMRP Profile. Deanna scored 35/40 (87.5%) on value items, the highest value score of all program participants. Unlike Carrie, Deanna scored a bit higher on the value items than self-concept, implying she places a high value on reading, even if she is less confident in her abilities as a reader. Like Carrie, Deanna indicated that knowing how to read is "very important," and indicated that as an adult, she will spend "a lot of time reading."

In contrast to Carrie, Deanna couldn't name a favorite author, but she expressed a desire to find more books by Sharon Flake, author of several books the adolescents were reading in the CDFFS program. She said, "I'm just now learning about the author who wrote *Begging for Change* 'cause I'm gonna go look when I get home. I'm gonna get on the computer and look up the author." Deanna explained that she was looking forward to taking *Begging for Change* home and re-reading it.

When asked why the book *Begging for Change* was important to her, Deanna explained, "It's really interesting to figure out how [Raspberry, main character] is gonna get out of it." Deanna also described life lessons or morals she had learned from the books: "Tell the truth," and "Always trust your friends and don't give up hope in them." She furthered, "I really like reading, so any book I read is really important to me."

While Carrie described a preference for historical fiction, Deanna described liking books that "have a movie about it." She explained, "I kind of also compare the books to the movies a lot, and the TV shows … Hollywood might make little changes." Deanna said she had most recently re-read "one of her old books," a serialized novel spin-off from a former popular TV show, *Lizzie McGuire*. Deanna said, "I found it so I just started reading it while watching TV." Deanna also mentioned looking up information on the computer about books and movies.

Reader self-concept. Deanna had a lower self-concept score than Carrie, at 33/40 (82.5%). However, on the self-concept survey items, Deanna indicated that she sees herself as a "very good reader" and feels

reading is "kind of easy for me." As opposed to Carrie, who indicated she reads "a lot better" than her friends, Deanna indicated that she reads "about the same as my friends." Deanna, like Carrie, indicated that reading a book is something she likes to do "often," and thinks that libraries are "a great place to spend time."

Similar to Carrie, Deanna shared that she finds reading in another content-area course difficult. Deanna explained that social studies was a difficult subject for her: "It's really hard reading all those different things from cultures and it's really hard even though it's in English. It's just also pretty hard, too, 'cause it's like really big words. So I can read big words, but not like really, really big ones. So it's a lot harder for me to read in social studies."

Other motivational influences. Deanna mentioned her teachers as early influences on her reading, but explained that her mother had become more of an influence because "once in a while we go to a bookstore." Deanna furthered that, "She helps me pick out a lot of good books so it makes me get real excited to read them." Deanna also mentioned that she liked doing role-play activities with books at school, and writing news reports. Deanna also mentioned that she writes poems that she shares with her friends.

Tammy Barker.

Value placed on reading. The third highest-scoring participant was 6th grade female, Tammy Barker. Tammy scored 62 of 80, or 77.5%. Tammy scored 32/40 (80%) on value survey items. Like Deanna, Tammy placed a high value on reading, even if she was less confident in her abilities as a reader. She indicated that knowing how to read is "very important," but thinks she will only spend "some of my time reading" as an adult.

Tammy made it clear in the interview that she wants to be a cook when she grows up, and she already seemed dedicated to this pursuit. She said, "I want to do my own show on Food Network, but my mom and me have to get a video. We're going to call it 'Teen Cuisine.'" She explained that she goes to the library to get cookbooks and looks online for recipes. When asked if she had read anything recently, she men-

tioned the menu at a restaurant she visited for her parents' anniversary.

Tammy may have placed a more utilitarian value on reading, then, than Deanna or Carrie did, but Tammy also seemed to see reading as a social activity that included friends and family members. Tammy described getting recipes from her family. She said "They're good cooks." She also said that she shared recipes with her friends and was trying to teach a friend how to cook.

In addition, Tammy mentioned a growing interest in "love stories" [romance novels] and explained that her friends were reading them. When asked if she shared reading materials with her friends, Tammy responded that she had a friend who read a lot, and she could share with her. She said she had shared a book called *Confessions of a Teen Nanny*, a popular teen "chick lit" series, with this particular friend and that she had recommended one of the CDFFS books, *Begging for Change*, to another friend.

That reading may have a social value for Tammy might also be evidenced in her description of a favorite reading experience. When asked to describe such an experience, Tammy recalled reading *The Tale of Despereaux* in 5th grade. She said, "We read the book and went to the movies and watched it." She furthered that, "I like the book better because the movie, it didn't really give all the details like the book did." When asked why this was a significant experience, she explained, "Well, it's kind of like, the whole, everybody read it in 5th grade. We went to the movies and watched it, and there were other schools there." That this was a significant experience Tammy remembered might point to the need for reading to have a purpose (social or otherwise) and reward for it to be important to Tammy.

Reader self-concept. Tammy scored 30/40 (75%) on the self-concept items and indicated on the survey that she sees herself as a "good" reader who reads "about the same as my friends." She revealed that she tells her friends about books she reads "a lot," but responded that reading a book is something she likes to do "sometimes." When responding to how she views reading (as "very easy," "kind of easy," "kind of hard," or "very hard"), Tammy selected "very easy," but wrote the word "depends" beside her answer. We wondered if this implied that

she sees a difference between academic reading and voluntary reading outside-of-school, and believes that she has more facility with certain kinds of texts. Like Deanna, Tammy said she found reading difficult in her social studies class, but also said she struggles in her math class. She explained, "It's having to use big words [in social studies]." In math, she said, "They have like x's and all that stuff."

Other motivational influences. Tammy described several reading experiences she had had at school. She described reading Gary Paulsen's autobiography, My Life in Dog Years, and "mostly textbooks." When asked if she liked reading fiction or non-fiction, she said she preferred the book she was currently reading at CDFFS, the young adult realistic fiction novel Joseph, by Shelia Moses (see Groenke, Venable, Hill, & Bennett, in press, for descriptions of all the Level III [middle grades] CDFFS texts read during summer 2010). When asked why she preferred this novel, she said, "It's more interesting." Tammy also shared in the interview that her mother bought books for her at book fairs.

Discussion and Conclusion

Different Readers, Different Needs

It is promising to see these young women value reading as highly as they do. As Krashen (1993) has suggested, adolescents who value reading and read voluntarily usually achieve acceptable, if not high, levels of literacy that will help them meet the demands of today's world. Wigfield (1997), too, posits that the value readers place on the task of reading itself may be one of the most important predictors of reading engagement.

But as our findings suggest, the reasons why these girls read, and thus the values they place on reading, vary greatly. Carrie seems to value reading for its "escapist" affordances, describing how she likes to experience the historical past vicariously through stories that "take you to that place" and help you "imagine going there." Carrie also wants to read to learn historical information, but sees reading, too, as something that will "help you later in life."

Deanna, an eager re-reader, seems to value the life lessons to be learned through stories, and the connections she makes with characters,

as she wants to see what happens to them as she progresses through texts. Thus Deanna is a character- and plot-driven reader, yet she knows there are larger themes and lessons to be learned through reading. In addition, unlike Carrie, who described a preference for historical fiction, Deanna seems to value texts that have current media connections through TV shows or movies.

Tammy didn't seem to place such "proximal," or immediate values, on her reasons for reading and seemed to view reading, instead, as something "utilitarian," or necessary to her future pursuits as a cook. This purpose contributed to a social value she may have placed on reading, too, as she shared recipes with friends and family members and considered family members to be "good cooks" that she aspired to model herself after.

Similarly, the girls differed in their concepts about themselves as readers. Carrie is a very capable reader, confident in her abilities with fictional texts, while Deanna and especially Tammy seem less confident. Still, all three girls shared a lower self-concept in regard to their abilities in content-area classes outside of language arts/ reading. Carrie—a confident reader of historical nonfiction and "12th grade" novels—admitted reading in science was difficult for her. In the interview, she described preferring her math teacher's instructional methods, which included providing visual models to accompany text. Both Deanna and Tammy commented on the difficulty of learning "big words" in social studies, and Tammy seemed to struggle with the language of algebra ("they have x's"), or more abstract math.

Transitional Readers

The very different kinds of already-motivated readers our profiles depict suggest one-size-fits-all instruction in language arts and content-area classes will not meet their needs or encourage their ongoing development as capable, confident readers. Reading researchers have suggested that positive self-concept develops in response to early positive experiences with reading (Malloy, Marinak, & Gambrell, 2010) and that positive self-concept continues to develop when readers build

confidence and experience success with increasingly difficult materials (Wigfield, 1997).

Carrie, Deanna, and Tammy are already-motivated readers, probably because they have had early positive experiences with reading. But they are also "transitional readers" (Hughes-Hassell, Koehler, & Barkley, 2010), making the transition from elementary school to middle school, where they encounter increasingly difficult texts and multiple content areas that have their own textual genres (predominantly nonfiction and technical). Oldfather and McLaughlin (1993) have suggested that motivation to read declines in middle and high school, as a result of changes in school and classroom environments. Malloy, Marinak, and Gambrell (2010) posit that middle and high schools "tend to be larger and less personal, and they permit fewer opportunities for student choice and personal or authentic literacy activities" (p. 4). We wonder if this might explain why we see the 7th grade participants in the CDFFS place lower values on reading, and show lower self-concepts as readers.

The Need for Differentiated Reading Instruction

We can't help but think that unless Carrie, Deanna, and Tammy—and students like them—receive opportunities to continue developing their self-concepts as capable, confident readers of multiple kinds of texts, the value they place on reading—and thus their motivation to read—may decrease. Carrie needs encouragement by her language arts teachers to read more sophisticated texts, and needs opportunities to move beyond "free reading" to guided reading, with opportunities to discuss texts in-depth, consider others' understandings of texts, and engage in higher-order thinking skills such as intertextual or interdisciplinary connection-making and textual analysis/synthesis. She also needs help moving beyond fictional texts, to more technical texts like the ones she encounters in science class. It sounds like she knows herself well enough as a reader to understand that she needs more kinesthetic and visual strategies (e.g., graphic organizers) to help her make sense of technical or scientific language, but she needs support and encouragement in utilizing such reading strategies on her own.

Conversely, Deanna and Tammy might benefit from long stretches of more independent, self-regulated, "free reading" time, which would help them both develop their reading fluency and deep textual knowledge of fictional texts, and improve their vocabulary. Deanna seems to be at the stage where she can easily immerse herself in a story, and she seems to read to learn something about her own life. Tammy seems to like fictional texts, and shares them with her friends, but both girls also mentioned liking texts connected to mass media culture. We don't think teachers should discount such texts in the classroom.

In Williams' (2008) book-selection study, elementary-aged students predominantly self-selected books about media stars. She explained they may have selected these books because they "represented a piece of their identity ... [and this] identity connection stemmed from media and mass marketing interests, which permeate their everyday cultures" (p. 60). As McGill-Franzen and Botzakis (2009) explain, adolescents' preferences for books that feature media stars may "index their membership in particular peer groups and enable them to take on the attributes of different identities—wealth, glamour, admiration, heroism" (p. 101). They suggest teachers draw on such texts as "entry points into learning and literacy" that are attractive to teens because they are interested in the content. But they suggest, too, that such texts can be used to encourage more critical thinking about "[adolescents'] worlds, such as why they like such texts or what messages the authors might be sending" (p. 115). We think providing opportunities for Deanna and Tammy to continue reading books of choice with guided instruction, as well as opportunities to discuss such works, will help them move—when they're ready—to more sophisticated texts.

In addition, like Carrie, who struggles with the language of science, Deanna and Tammy struggle with the non-fiction, expository language, and increasingly academic vocabulary found in social studies texts. Middle grades social studies teachers should consider using young adult novels and other fictional or historical fiction stories (and popular culture/mass media texts) to help students develop the kinds of background/contextual knowledge and relevancy they may need to further engage with more academic, factual texts. Middle grades teachers should also

teach explicit content-area reading strategies for learning new vocabulary words. Unfortunately, as reading researchers attest, teachers tend to underestimate the level of support middle grades readers need for continued growth as readers.

In conclusion, we suggest that literacy leaders and educational policy-makers resist problematic discourses that question "if" black adolescents read, or suggest black adolescents won't or can't read. Our findings prove that black adolescents do read, for rich and varied purposes that may not be understood by their teachers or best served in school contexts. We think a much more helpful discourse would center on the reasons motivated readers give for reading, the texts they choose to read, and the strategies they describe using to navigate multiple kinds of texts. Such attention would better inform adolescent literacy instruction to serve the individual needs of *all* readers in the classroom.

As it stands, we know many good instructional guides for differentiated reading instruction exist (cf., Dudley-Marling & Paugh, 2004; Groenke & Scherff, 2010), but in today's high-stakes context, teachers feel constrained to "teach to the test." But we know standardized test scores alone can't tell us who our students are as readers, or what they need to continue developing as capable, confident readers throughout the middle and upper grades. As our work shows, we need more individualized assessments, and the AMRP survey certainly proves to be one such assessment that teachers and school literacy leaders can use to more deeply know and thus begin to reach *all* students as readers.

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7

The early college experience: Identity, community, and academic discourse – South Texas student stories

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Abstract

Through national, state, and local initiatives there is an increasing effort to motivate and increase college success for at-risk students. Many school districts are exploring and embracing programs that are making strides to bridge the gap between secondary education and postsecondary success. One such school is the Flour Bluff University Preparatory High School in Corpus Christi, Texas. This school is a partnership between Flour Bluff Independent School District and Texas A&M University–Corpus Christi. This study followed six high school students from the initial cohort as they concurrently navigated a high school and university system, earning both high school degrees and university credits. Although student experiences varied, the early college high school provided a generally positive experience and the opportunity for students to begin their dreams of achieving college degrees.

Throughout the United States, a number of innovations are in place to support the transition of students from high school to postsecondary institutions. There are many terms for these schools; however, a term used by the Gates Foundation (2010) is Early College High Schools (ECHS). Nationwide, the initiative to expand early college high schools

follow a model suggested by the William and Melinda Gates Foundation. The Gates foundation is currently focusing national attention on the early college high school format with the philosophy that all students, not just advanced placement students, are capable of completing a rigorous secondary program while taking postsecondary classes concurrently (Marcy, 2006).

The early college high school model usually begins with a funding and operating partnership between public and private entities including a local high school and postsecondary institution. Approximately 24 states and over 200 schools have a form of early college school. Early College High Schools are not a new phenomenon; in 1971 the Carnegie Commission on Higher Education produced a report titled *Less Time, More Options* suggesting that the time spent in undergraduate college could be reduced without sacrificing educational quality. This study advised that some high school students would positively respond to additional academic opportunities, such as offering college classes while still in high school.

Dual credit programs were initially created to allow high-achieving high school students to increase their academic opportunities. One purpose for these early acceleration programs was to shorten the time needed to complete the requirements of a postsecondary degree by taking college courses during high school. In addition, dual enrollment courses are successful when socially-prepared and academically-advanced students are offered the opportunity to take the courses. According to Hunt and Carroll (2006):

> Acceleration is good public policy when students that are in high school and they can access AP or dual enrollment courses because they want to access those courses and are ready to. They are at a certain level academically … It becomes a dubious policy when we are simply just trying to fast-track kids through the system. (p. 43)

The Texas Legislature passed an education bill in 2006 (HB 145, codified as Texas Education Code 29.908) that expanded a dual credit option as a way to prepare all high school students for college. The

Texas Education Agency (TEA) regulates ECHS programs with respect to funding and ensuring the ECHS model is maintained. Students participating in these programs combine high school courses with college courses, working toward a high school diploma and acquiring up to two years of college/university credit. This program allowed Texas to embrace the Early College High School model and specifically target the traditional underrepresented ethnic minority groups, first-generation college students, and other "at-risk" students in college (TEA, 2010). There are approximately 41 schools in Texas that offer a combination of high school and college classes (Texas High School Project, 2010).

Texas High School Project

The Texas High School Project (THSP), created in 2003, is a public-private alliance committed to increasing graduation rates and college enrollment rates in Texas. THSP's mission is that "Texas high school students will have the opportunity to achieve their highest educational potential and promote state competitiveness in the 21st century" (THSP 2010). This mission builds learning environments through established relationships with both students and educators, challenging students with rigorous lessons, and giving students the motivation for attending college. THSP supports new and redesigned high schools, educator training, and specific programs designed to help students get ready for college. Early college high schools allow students the opportunity to achieve two years of college credit and perhaps an Associate's Degree at the same time as they are earning a high school diploma (THSP, 2010).

THSP partners include a variety of private and public entities. The private side of THSP is managed by Communities Foundation of Texas (CFT) and the public side by Texas Education Agency. Statewide, and THSP oversaw the creation or redesign of 172 schools affecting over 83,000 students (THSP, 2010). Table 1 describes the demographic characteristics of the students at these schools.

Table 1
Demographics of THSP schools

Identifier	Percentage
Hispanic	58
African-American	22
White/other	18
Asian	2
At risk	50
Economically disadvantaged	66

The primary office of THSP is headquartered within the Communities Foundation of Texas (CFT) facility in Dallas, Texas. CFT is a public charity founded in 1953 and describing itself as the largest community foundation in Texas and one of the largest in the country. CFT established several education programs to increase the effectiveness of Texas's schools, including the Early College High School Initiative, redesigned High School Initiative, New Schools Initiative (replication of high-performing charter schools) and a Leadership Initiative for all schools.

Early College High School Initiative

The Texas High School Project describes the Early College High School Initiative (ECHS) as an innovative model for increased high school completion and college enrollment. THSP provides funding to school systems that establish Early College High Schools on their campuses or at related sites in areas of the state that have a traditionally low high school graduation rate or low college entrance rates. THSP's goal of the Early College High School Initiative is to provide traditionally underserved students—at-risk, economically disadvantaged, and first-time college goers—opportunity to earn a high school diploma and up to 60 college credit hours in an academically supportive environment.

The program generally provides the costs of the college tuition (THSP, 2010). One of these Texas schools is Flour Bluff University Preparatory High School (UPHS) in Corpus Christi, Texas. This school is a partnership between Flour Bluff Independent School District (FBISD), Texas A&M University–Corpus Christi (TAMUCC), and the Texas High School Project. UPHS is located in Nueces County, a South Texas region accounting for approximately 9,000 high school students. Table 2 describes the demographic characteristics of students at FBISD.

Table 2
Student demographics at FBISD

Identifier	Percentage
Ethnicity, White	57
Ethnicity, Hispanic	34
Ethnicity, African American	4
Ethnicity, Other	5
At risk	55
First Generation College	47
Economically Disadvantaged	26

University Preparatory High School

Flour Bluff Independent School District and Texas A&M University–Corpus Christi's College of Education collaborated to create the University Preparatory High School (UPHS) to meet the requirements of the Texas High School Project. The school began in 2006 with approximately 80 students. Approximately 100 students were added each subsequent year. Following Texas' Early College High School Initiative, the school is based on the principle that academic rigor, combined with the opportunity to save time and money, is a powerful motivator for students to work hard, improve performance, and earn a college degree (UPHS, 2010). The school's goal is to establish a learning community that values the highly literate, writing-intensive environ-

ment where students develop the study skills and stamina to be successful in university course work (UPHS, 2010).

Candidates for the program must demonstrate a combination of the following characteristics: economic hardship, English language learner status, first-generation college student, or ethnic minority status that is under-represented in higher education. Selection into the program models the criteria outlined by the Gates Foundation, which provided initial startup funding.

UPHS blends high school and postsecondary instruction, allowing students to complete high school and the opportunity to earn up to 60 college credit hours. Students enrolled in UPHS currently have their college tuition paid. UPHS emphasizes academic skills, support systems, and content knowledge to create a better transition between high school and college. High School freshman classes are reading-intensive, targeted for college preparation. As sophomores, UPHS students take four college courses, taught by university professors, on the UPHS campus. These four courses are Spanish I and II, speech, and art appreciation. Once students complete their sophomore year, they begin to take college courses on the TAMUCC campus. Generally, these courses consist of the college freshman triad, which includes English/composition, history, and government. During the high school student's senior year, the college courses become more individualized based on interests and levels of success on placement tests and in previous classes. The intent of the UPHS program is that students complete their college core requirements by the time they graduate. Although this is possible, most students graduate with approximately 30 hours of college credit.

Early College Students
Early college high schools follow a philosophy that all students have the intellectual ability to succeed in college and provide these opportunities through enrollment in a dual program combining high school courses and college courses into the curriculum (Bailey, Hughes, & Karp, 2003; Boswell, 2000). However, what many students do not have is the background experience to have a vision for college, the necessary experience to apply for a college, the skills to succeed in college, and an

academic and social support system at either the high school or college level (Nodine, 2009). By establishing ECHS programs that incorporate transitional social and academic networks, Poirier (2009) explains that transitions from high school to college enhances the development and use of self-regulated learning strategies by the student. This is one transition that is essential to the success for the students and these types of program initiatives.

Student Complexities

It is clear that beginning students entering a college preparatory program encounter interesting complexities regarding identity, community, and academic discourse. Students learn the discourse community of the high school and of the college at the same time. These students may create dual identities, as they are both high school student and college student. In addition, these students must acquire the discourses associated with high school and those associated with college.

The ECHS model planned for small class sizes to ensure student relationships are a fundamental component to the learning environment without compromising academic rigor that is crucial to the high school to college transitional program. While it seems self-evident that students who are attending an early college would receive rigorous academic course work, what may not be self-evident are the sets of social constructs that these students have to negotiate as part of their new academic environment. For example, at their initiation into high school they are also inducted into the academic discourse community of the postsecondary institution, which has its own sets of values and social communities. How do these students create both academic and social identities that are necessary components of discourse communities and social placement within these differing academic communities? Even though ECHS programs offer student support services, the challenges of navigating identity, community, and academic discourse would offer its own set of challenges that are beyond the typical student support services.

Purpose

This research was a narrative of one high school's program and six students as they maneuvered through two academic spaces–high school and postsecondary education. The study was a collective case study that followed six students of the first cohort of UPHS and documented six students' challenges of participating in an early college experiences (Creswell, 2007; Johnson & Christensen, 2004). This research was enriched by the descriptive and longitudinal aspects of the study that is intended to "tell the stories" of these students.

The purpose of the study was to present the summary results of a series of interviews with six students of the first cohort at the Flour Bluff University Preparatory High School. The study offers a lens in which administrators, educators, parents, and students can review the benefits and challenges of an early college experience by reading about student's experiences from the first cohort as they progress through the program's first four years of implementation. The following research question guided the study:

How did the high school to college transitions regarding student identity, community, and academic discourse change during the four-year combination of high school and early college?

Participants

The participants are six students in the first cohort (2006) of the FBISD University Preparatory High School. They reflect the demographics of this cohort, some of whom meet one or more of the established criteria of being a "first generation" college student, being from a family that does not have financial resources for college, and/or from an ethnic minority group underrepresented in college.

Participants were invited to this study and completed consent forms detailing the study and their participation in the study. Both the students and parents/legal guardian signed these forms. In order to maintain confidentiality, participants were identified as Student 1 (S1), Student 2 (S2) and so forth, for a total of six participants. Participant demographics are detailed in Table 3.

Table 3
Participant demographics

Identification	First Generation	Gender	Ethnicity
S1	Yes	Female	Hispanic
S2	Yes	Female	African-American
S3	No	Female	Hispanic
S4	Yes	Male	Hispanic
S5	Yes	Male	White
S6	Yes	Male	Hispanic

Method

This preliminary research study was longitudinal and occurred between the years of 2006 to 2010. The length of this project presented several challenges. The research began under the tutelage of one TAMUCC professor and subsequently transferred to another university professor, who continued the supervision of the research. Similarly, the interviewers were a series of doctoral students that changed as the research continued through the years. The authors directed the final analysis and documentation, which involved the final participant interview and a complete review of all the data, previous organization, and analysis. This provided not only additional data review, but also another viewpoint regarding the UPHS program, the longitudinal research and the participants.

The major source of data collection was semi-structured interviews conducted with the case-study students. The interviews began as each student began high school and were conducted individually and at least once per year throughout the four-year education period. All interviews were conducted at the participant's high school site and lasted approximately one hour. The interview protocol for the students included open-ended questions regarding the early college experience specifically directed towards self-identity, community and academic discourse. The students described, explained, discussed, and elaborated upon their own

experiences. There was a group interview with the participants during the last semester of the final high school year. The purpose of this interview was to conclude the research and solicit final comments from each of the participants. This interview lasted approximately 1.5 hours.

The interviews provided an abundance of data, rich in student comments about their experiences at both high school and the postsecondary education programs. The participants had much to say about their experiences and interactions with the variety of teachers and administrators. All student interviews were recorded and then transcribed into a database for later analysis.

Data analysis consisted of reviewing the written transcriptions of all interviews and then organizing the six participants' comments into a series of common themes. The common themes included all of the participants' comments, and these comments and themes formed the basis of the data findings.

Findings

The students who participated in this study provided detailed accounts of their experiences in the UPHS. This section describes students at the beginning of their UPHS experiences, explores students' reasons for joining the UPHS, their communities, and academic discourses. Then students are described at the end of their experience, examining changes in the students' perceptions. Their comments are taken from the UPHS application, essays, questionnaires, and individual and group interviews.

The participants in this study joined the UPHS for a variety of reasons. When they were first accepted, each student had completed the 8th grade and was 13 or 14 years old. Students recognized there would be benefits of attending UPHS and expressed their personal dreams of attending college. All of the participants (except one) were the first in their families to attend college in any capacity. S2 expressed a common refrain: "I will be the first in my family to go to college," and S3 stated, "College is one on my goals." S4 wanted to "… get a jump on life and make my family proud," while S6 saw joining the UPHS as an opportunity to "get a leg up [on college credits]."

Students recognized the benefits of completing both high school and college during their time at the UPHS, namely achieving personal goals, using time wisely, and saving money. S1 described the benefits of the early college program as a "… head start in achieving my goals," S3 realized the program was a way to "… continue my education beyond high school," and S2 called the UPHS opportunity "… the wonderful gift of education." S6 stated the program allowed "… me to get college earlier in my life." This was a common sentiment as others agreed that the UPHS would "... get my college out of the way early" (S4), "… years of college done free" (S3), and "taking classes for free and knocking out my core classes during high school tenure—I plan to graduate with at least 60 credits" (S2). Each expected to graduate high school with college credit.

All students recognized the financial benefit of having their college tuition paid. S1 stated the program pays "… the cost of tuition … and get two years of college done." S4 said the program will help "… to obtain scholarships or grants, while better preparing for college." S5 simply stated, "We can't afford the prices of books or anything." The students were confident in their abilities to succeed at UPHS. They described themselves as capable of handling the increased academic workload. All expressed they were "hard workers" and liked to be challenged and wanted to get better at subjects or academic skills such as math, science, English, or writing. Along with the academic, S1 stated, "I am capable and up to the challenge of hard work," while S2 described herself as "… a hard worker who does the best on getting around obstacles." S3 was straightforward: "I get things done; I study; I am capable." S4 stated, "I am a good student; I do work and try to do my best." S5's comment was reflective of the group's confidence: "When I want something, I work hard to get it." The participants recognized the opportunity to enroll in both high school and college, and they believed that as hard workers they would be able to complete their goals of high school graduation followed eventually by college graduation.

The participants believed that their academic community would help them succeed. They recognized the value of being part of the UPHS. S1 looked to "… get to know everyone as well as get along" and

to have "lots of support from friends." S2 recognized that a "separate building [for UPHS students] created a unique family … we became a strong group," and S3 echoed the sentiment: "We got to know everyone like our own family."

Since they were the first group to attend the program, many of the participants felt like "guinea pigs." They used the term to express how everything they did was a new experience not only for them, but for the school faculty as well. Students believed teachers provided extra support to the students in order to facilitate student success within the program. S2 stated that "Teachers helped me along the way," and S4 said the "Teachers are nice and supportive. Teachers always go out of their way to try and help you."

Students' academic discourse adapted quickly to the experience of high school while preparing for and taking university courses. Students exhibited abilities to adapt to new situations as courses and professors changed with each semester. S1 stated it was important to "Learn to adapt to new learning … learn to be more flexible … and adjust to styles of homework." S2 explained it was important to "Learn how to balance high school and college classes."

These students recognized the need for academic skills in order to keep up with an accelerated pace of instruction requiring more work, evidenced in S1's statement, "you have to organize time; stay balanced." S2 stated, "I have a planner; it allowed me to get adjusted to the amount of work that's due on specific dates." S6 summed up an important lesson for all students: "We learned that we really gained the grade we deserved by the work we put into it."

Upon graduation from the UPHS, the participants earned a range from 13 to 41 college credits. Their grade point averages for the high school portion of the program ranged from 88.56 to 96.62, on a 100 point scale. Grade point averages at TAMUCC ranged from 1.09 to 3.34, on a four point scale. All students in the study stated they plan to continue their college work.

Students believed they had matured during the program and were able to handle more rigorous academic work. S2 felt that they had become a "… well rounded, determined student at UPHS with good ethics

that I apply to my college life." S3 said that "I was more active, enjoy school and matured faster than the average high school student," and S4 also stated "[UPHS] made me more mature."

These students recognized that college can make a difference in life, and perceived themselves as more successful and responsible than high school students not enrolled in UPHS. Each student expressed one major reason for this new sense of maturity was the experience of having a "worst" semester, which was defined as a semester where everything seemed to go wrong, academically, personally, or both for the students. In learning to cope with the worst semester, students gained confidence in their abilities to overcome obstacles.

One reason they attributed to being able to overcome their worst semester was the support they received at UPHS. They were grateful for the help they received from teachers with their studies and the transition to college. The participants appreciated being treated "as adults" at the college campus, and stated this same treatment did not often occur on the UPHS campus. In addition, knowing a select group of students doing the same program provided a sense of community. In their time at the UPHS, students felt they grew a great deal academically as well. They learned to better organize time and keep a balance between all aspects of life including school, sports, work, and family.

Discussion

At the end of 2010, UPHS looks forward to graduating another cohort of students completing a four-year combination of high school and college program. This preliminary and longitudinal case study of the first six students to graduate from UPHS documents the experiences of the UPHS education format. Each student experienced a range of success; however, all completed high school with college credits. Several of the students had as many as 41 college credits in addition to their high school diploma. However, several participants were unclear about the number of actual earned college credits.

The transitions between high school and college varied with each participant as might be expected from students of this age. It appears that the students with the most college credits were more successful

in their success at both the high school and college. For each of these students, their participation in this early college high school provided a generally positive experience and the opportunity to begin their dream of achieving a college degree.

Conclusion

The importance of this preliminary study lies in its longitudinal nature and its focus on students' experiences as they navigated the two academic settings. This study documented the students' challenges of participating in an early-college experience. The objective was not to extract quantitative data to highlight strengths or expose weaknesses within the program but rather to offer a naturalistic viewpoint from the perspective of students involved in the development of this early-college program.

Several questions arose during the course of this study:
- What happened to students after they graduated from high school?
- How have subsequent UPHS cohort experiences changed as a result of the first cohort?
- Why was there such a range of college credits earned by this cohort?

The student narratives collected in this study offer a lens by which further research upon the topic may be undertaken. It is the stories of these individuals that clarify the need for student options and details how student make meaning of their educational process that challenges the preconceived notions of traditional high school programs throughout the nation. In addition to looking at the numbers to quantify problems associated with education, educators should hear listen in order to understand the needs of their students. After all, their success is their story.

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Higher education

8

Capturing curreres: A hermeneutic phenomenological examination of teacher candidates' engagement in an urban field placement

Laurel Kristine Chehayl

Abstract

Often, teacher candidates face challenges when placed in diverse or urban classrooms to meet field experience requirements. Valuable insight can be gained by exploring new ways to support teacher candidates in their early field placements. This study employed the method of currere to unearth ways in which secondary teacher preparatory educators can help students engage more comfortably and authentically with children in urban public schools.

Introduction

Teacher educators need to better understand teacher candidates' perceptions of urban public schools. By taking the time to explore how teacher candidates imagine urban public schools, teacher educators can find ways to demystify these spaces. The field of teacher education can gain valuable insight and examine new ways to support teacher candidates as they engage in early urban field placements. The purpose of this study was to discover ways in which secondary teacher preparatory educators can help teacher candidates engage more authentically with urban public schools.

This study is both timely and significant because, over the last century, the United States has been changing dramatically. Despite the fact that "American" and "white" are frequently conflated, by the year 2000, 28% of the population was nonwhite, and by 2050 it is projected that

the percentage of nonwhite Americans will almost double (Jay, 2003). Historically, race has significantly impacted American societal structure and discourse. In the United States, from the throes of the Civil Rights movement to as recently as 2005 when Hurricane Katrina took the lives of disproportionately high numbers of economically disadvantaged black Americans, social discourse and policy has often centered on issues of racial subjugation, marginalization, and unrest.

Is it any wonder, then, that young teacher candidates in America typically shy away from circumstances in which they may encounter racial issues? The overwhelming majority of teacher candidates are not applying to positions in urban public schools (Claycomb, 2000; Foster, 2004; Ingersoll & Smith, 2003; Kozol, 2005a; Theobald, 2005). Teacher educators would benefit greatly from insight into how teacher candidates think and feel about urban public schools. Attending to teacher candidates' personal experiences and reflections would "help prospective teachers examine those events in their lives that influenced them to be teachers and learn to question the sources of their beliefs, attitudes, and biases" (Valli, 1997, p. 78). Through this understanding, teacher preparatory programs can demystify urban spaces and help students cope with these complex and very important feelings. "Most whites uncritically assimilate the cultural criteria of dominant racist values and practices and as a result are unable to historically situate themselves, that is they are unable to identify the cultural mechanisms that have shaped their ethnic identities" (Leistyna, 2005, p. 272). For curriculum decision makers in teacher preparatory programs to pay no heed to these pressing circumstances in their curricular deliberations may be a grave disservice not only to their students but also to urban schools.

The composition and problems of urban schools are not a secret. High dropout rates, substance abuse, and teen pregnancy are significant problems that occur in many educational settings, but disproportionately in urban US school districts. However, literature is apt to conflate "urban" schools with "multicultural" schools. It is important to acknowledge that American urban public school districts do not corner the market, so to speak, on multiculturalism; in fact, they are most often more appropriately described as monocultural. Black or Hispanic

students overwhelmingly populate American urban public schools, a point made by Jonathan Kozol's (2005 a, b) extensive research on urban public schools.

The vast majority of teacher candidates have been raised and educated in a society in which their identities are linked not to their ethnicity but to their "racenicity;" it is not their ethnic heritage that defines them, but the color of their skin. Leistyna (2005) explains that racenicity is "the result of the antagonistic social relations caused by the unequal distribution of power throughout the society along racial lines" (p. 272). When we consider this imbalance, coupled with the contentiousness of race issues in our social discourse, it is easy to imagine that many teacher candidates enter the field with at least some preconceptions and stereotypes of what it might be like to work in predominantly "nonwhite" urban schools. Further, teacher candidates are not typically graduates of urban public school districts; they are predominantly and increasingly young, white, and middle class females with limited exposure to urban settings (Delpit, 1995; Ladson-Billings, 1994, 2001; Proctor, Rentz, & Jackson, 2001). "The socioeconomic background of teachers shows them likely to be white females … the majority of [whom] do not aspire to teach in 'urban' schools" (Kailin, 2002, p. 71). Furthermore, 88% of America's 500,000 full-time education professors and instructors are white and middle class (Ladson-Billings, 2001). The differences between teacher candidates and urban school students strongly indicates that when entering an urban school district in a situation such as an early urban field placement, a significant number of teacher candidates will likely find themselves in a unfamiliar cultural, social, and economic situation (Brown, 2002).

In light of the different demographics of urban public schools and teacher candidates, this study in part is constructed to address "othering" in urban public schools as it relates to the experience of teacher candidates. As one author aptly described his predominantly white school students, teacher candidates do not "see their own whiteness and the way it has shaped their lives" (Smith, 2005, p. 31). That divergence generates a feeling of otherness, and a distinct polarization between those unfamiliar with the urban school culture and the members of the culture itself. "A

failed assumption exists that there is a homogeneity of thinking—attitudes and preferences that polarize whites and 'others'—and that 'others' reside in a comfort zone between and among themselves" (Dilworth & Brown, 2001, p. 645). If they are not addressing this homogeneity of thinking, teacher preparatory programs are not only failing the teacher candidates with whom they are charged to professionally prepare for the field of education, but also implying through their lack of acknowledgement complicity to this "othering."

For this and possibly additional reasons, it is more necessary than ever to encourage teacher candidates to decisively examine their own thoughts and feelings about the populations of urban public schools. These thoughts and feelings are generated and reinforced throughout their lives as they negotiate experiences and relationships with family, friends, school and social environments, and cultural texts. By facilitating their engagement with their own reflections, they may achieve a deeper understanding of themselves and their relationship to others. By facilitating these connections, teacher educators might assist them in achieving more realistic understandings of society as they situate themselves within it.

> Without an understanding of who we are as historical and cultural beings, unable to make linkages to the social and political realities that have shaped our world, we have become vulnerable to ideological manipulation … which reproduces racist sentiments and thus renders us complicit in the injustices inflicted upon "Others" as well as upon ourselves. (Leistyna, 2005, p. 277)

Through compassionate conversation and heightened understanding, it is hoped that white teacher candidates can begin to free themselves from some of society's injustices and expand their professional horizons to include those who in the past may have been marginalized as "others."

Husserl writes, "Had I the same access to the consciousness of the Other as I have to my own, the Other would have ceased being an Other and instead have become a part of myself."

(Husserl in Zahavi, 2003, p. 114). Husserl contends that when people have the opportunity to engage with the life experience of the person who is seen as the Other, not as a mere object but instead within the context of personal relationship, they gain access to a deepened or more "authentic" experience of that person (Zahavi, 1990, p. 114). For teacher candidates to have that authentic experience, they need not only be exposed to those that are othered, but also critically reflect upon the similarities and differences discovered in that exposure. "No communication would be possible between persons who lived in completely different worlds. It is because there is a common human world … that is it possible to establish some degree of communication across cultural barriers" (de Laguna, 1960, p. 786).

For teacher candidates, this combination of experiential submersion, communication, and analytical reflection is attainable in a thoughtfully constructed field placement. Books about urban education, journal articles, and anecdotal stories of other people's experiences teaching in urban public schools cannot take the place of entering and navigating a purposefully scaffolded urban field placement. Studies have shown that while teacher candidates are in the field their experience needs to be scaffolded with reflective activities: "The point is to raise questions and make a mess rather than let students off with neat and easy answers … no more raising your hand just to say, 'Racism is bad.'" (Smith, 2005, p. 34). Questions must be raised about issues students encounter in the experience itself: issues of race, curricular and pedagogical challenges, and their experiences in the urban milieu. Field experiences are a logical venue to consider those questions and explore relevant issues. A field experience is a chance to, among other things, test interest in teaching. Teacher candidates require exposure to a variety of philosophies in the field and the opportunity to observe different teaching strategies and educational settings (Grossman, 2003; Villegas & Lucas, 2002). An early field experience allows teacher candidates a chance to critically examine what it feels like to be a teacher and to decide if the profession is truly suitable for them (Villegas & Lucas, 2002).

Teacher candidates often enter preparatory programs with tenacious beliefs about urban public schools. It is important for teacher educators

to not simply provide anecdotal truths and theories far removed from students' life experiences. To debunk these persistent and potentially dangerous misconceptions, and foster understanding of the complexities of the classroom, teacher preparatory programs should engage teacher candidates in reflective experiences:

> When students examine closely the rich complexities born of social interaction, subjective experiences, dependency and struggle that characterize life in and outside of the classroom, as well as the moral and existential dilemmas that are so much a part of the work of teachers, reality does not take on an immutable and unitary meaning. (Teitelbaum & Britzman, 1991, p. 170)

Field experience provides the opportunity for such an examination, or situated cognition; it offers the teacher candidate the opportunity to learn about various aspects of teaching through the application of knowledge to authentic situations (Feiman-Nemser & Remillard, 1996). An effective program incorporates challenging and thought-provoking critical reflection to help teacher candidates make sense of their experience, and may provide support in the form of meetings or seminars throughout the field, preferably led by a teacher educator or someone closely familiar with urban public schools. "If prospective teachers spend only one semester in one classroom with one teacher before they complete their preservice education, they will not be sufficiently prepared to work effectively with students of diverse backgrounds" (Villegas & Lucas, 2002, p.136). This assertion is, in sum, a contention to support the creation and implementation of a wide variety of early field experiences imbued with scaffolded critical reflection. By giving the teacher candidate an opportunity for submersion in an urban setting, it is hoped that they will be able to find a new orientation to the urban school, and begin to recognize and understand the fundamental differences that may exist between their lived experiences and that of the student in an urban school. Through the social, intellectual, and emotional engagement availed in an urban field placement the teacher

candidate may have the opportunity to transcend potential apprehension or misunderstanding of the urban school setting.

Hermeneutic Phenomenology

While many studies have been conducted about field placements and urban field placements, few center upon early urban field placements. Therefore, this study aimed to engage in a deep exploration of teacher candidates' critical conversations and purposeful reflections about an early urban field placement. The method of hermeneutic phenomenology was chosen, in part, because of its distinctive approach to the life-worlds of the participants and the authentic respect and consideration for the pedagogical experience: "The aim of phenomenology is to transform lived experience into a textual expression of its essence—in such a way that the effect of the text is at once a reflexive re-living and a reflective appropriation of something meaningful" (van Manen, 1990, p. 36). Phenomenological work looks closely at how incidents and experiences naturally occur (van Manen, 1990; Zahavi, 2003). Recently phenomenologists have begun explicating their procedures, although it has historically been called the "method without techniques" (Miles & Huberman, 1994, p. 2).

Hermeneutics is a very old term that is familiar in many fields, including philosophy, theology, literature, and the social sciences, and it has many definitions and connotations (Gallagher, 1992). van Manen offers a designation for the purpose of qualitative research in education. He defines hermeneutics as "the theory and practice of interpretation" (van Manen, 1990, p. 179), and synthesized these two elements in a specific research approach; the essence of lived experience is embodied in language through a reflective process of recursive examination and consideration. Hermeneutic phenomenology "combines both interpretive/hermeneutic methods and descriptive/phenomenological methods for the purpose of examining the lived experiences or life worlds of people being studied" (Hatch, 2002, p. 29). It is a "human science" in that it studies human beings and the way they relate to the backdrop of their lifeworlds (van Manen, 1990); "Hermeneutic phenomenology is a philosophy of the person, the individual, which we pursue against the

background of an understanding of the evasive character of the logos of
other, the whole, the communal, or the social" (van Manen, 1990, p. 7).

Each participant's experience is approached as exceptional and
interpreted as specific to the individual. Instead of examining the
experiences as one large set of data, the experiences are individually and
separately examined in order to capture the *lebenswelt*, or the quintes-
sence or deeper meaning of the participants' individual voices. This type
of reflective examination is "discerned by looking at experience from
within, as lived by oneself" (de Laguna, 1960, p. 781). Lebenswelt
approaches relationships by subjectively acknowledging the space be-
tween individual voices rather than examining their inherent differences
(Barbaras, 1991; Gallagher, 1992; Miles & Huberman, 1994).

The purpose of data collection in hermeneutic phenomenology is to
gather information about the lived experiences of the participants to bet-
ter understand their engagement with a particular human phenomenon,
and examine the vast and changing exhibition of the lebenswelt. It has a
broad scope; therefore, "to deal with the inexhaustibly open and ever-
changing phenomena of the Lebenswelt, a richer, more flexible, and
more far-ranging mode of expression is required" (Wild, 1958, p. 461).
The data include varied textual representations of the lived experiences
of the participants. Descriptions of these experiences are sometimes
gleaned from personal interviews, observations, and close examination
of literature (Hatch, 2002). Through these various textual representa-
tions of human experience, hermeneutic phenomenology provides the
opportunity to gather a clear picture and deep understanding of a par-
ticular human phenomenon. To interpret data using this method,
phenomenologists recursively read the gathered texts in their entirety
and reflect upon them in an effort to realize the essence of their mean-
ing. Phenomenology does not adhere to strict laws of more traditional
qualitative data analysis and interpretation such as coding or sorting.
Instead, it seeks to achieve a "practical understanding of meanings and
actions" (Miles & Huberman, 1994, p. 8). While phenomenological
interpretation often stops at this point of understanding, hermeneutic
phenomenology takes the analysis one step further and attempts to

construct a "coherent, internally consistent argument" about the phenomenon in the findings (Miles & Huberman, 1994).

Hermeneutic phenomenology acknowledges the participant's indivisible connectedness to the world and that we learn through that relationship. "All human activity is always oriented activity, directed by that which orients it. In this way we discover a person's world or landscape" (van Manen, 1990, p. 182). As human beings trying to situate ourselves in the world, we enter new circumstances or engagements in different ways depending on our own prior life experiences. van Manen writes:

> To know the world is profoundly to be in the world in a certain way, the act of researching—questioning—theorizing is the intentional act of attaching ourselves to the world, to become more fully a part of it, or better, to become the world. Phenomenology calls this inseparable connection to the world the principle of "intentionality." (p. 5)

Each individual has his or her own life story, the events of which mold, guide, and shape a person's understanding of new experiences. Similarly Gallagher, citing the foundational work of Husserl, notes significantly that all experiences have their own horizons. It is through engagement and experience that all things, or horizons, might become known or familiar. Referring to a phenomenological description of experience, Husserl writes:

> It is not open to doubt that there is no experience, in the simple and primary sense of an experience of things, which grasping a thing for the first time and bringing cognition to bear on it, does not already 'know' more about the thing than is in this cognition alone. (Husserl in Gallagher, 1992, p. 60)

In Husserl's theory of intentionality, he professed that every person's life has "horizons," and for that reason "there is no isolated primal impression, there is no pure self-presence" (Zahavi, 2003, p. 97). Every human experience brings with it previously constructed impressions

or pre-understandings, so that no experience is purely devoid of consideration. Through the lens of our prior knowledge, we navigate the unknown events or circumstances that lay before us on our life journies. Hermeneutic phenomenology posits that it is with these untouchable and ever-present horizons that we are either consciously or unconsciously occupied; it is in them that we construct our knowledge of the world (van Manen, 1990; Zahavi, 2003).

The Method of *Currere*

I elected to utilize hermeneutic phenomenology for this study for several reasons. First, my intention is to give voice to individual teacher candidates as they share their experiences in course work and field experience. A distinct purpose of this approach is to authentically engage with individuals as they experience a phenomenon. Second, participants are perceived not as subjects to be analyzed but as co-constructors of the body of knowledge examined. Other studies examining teacher candidates in urban field placements cited here have utilized Likert scale or short answer surveys as their method of data collection. However to gather more authentic voices of participants in early urban field placement, this study employed more personalized and open-ended methods of data collection. Pinar's (1976) method of currere is a means of examining how an individual has evolved over time, both personally and professionally, through their academic studies. Pinar (2004) writes:

> The method of *currere* [reconceptualizes] curriculum from course objectives to complicated conversation with oneself (as a "private" intellectual), an ongoing project of self-understanding in which one becomes mobilized for engaged pedagogical action—as a private-and-public intellectual—with others in the social reconstruction of the public sphere. (p. 37)

To articulate and examine one's own *currere*, or professional life experience, first requires a great deal of thoughtful reflection on experiences, people, readings, and events that have influenced (either positively or unconstructively) one's journey of becoming. A lifelong

endeavor, currere seeks to uncover the personal and academic influences that have acted upon that evolution, through "complicated conversation" with oneself (Pinar, 2004, 1976). Through this experience, one may seek to become a "public intellectual." The method of currere is constructed of four consecutive steps to scaffold the participant's reflection and imagination: regression (looking back at what has influenced one's professional and personal growth), progression (imagining where one hopes to be in the future), analysis (a judicious examination of one's present), and synthesis (a momentary decision and the beginning of a lifelong endeavor to consciously engage in a holistic approach to one's academic lived experience).

Essentially, the method of currere serves as scaffolding for the purposeful reflection of "one's own experience in light of excavations of one's past, multiple narratives of one's present, and anticipations of one's possibilities" (Pinar & Grumet, 1976, p. xi). Currere scaffolds the examination of oneself by looking at one's own life story of becoming an educator; it seeks to capture its lebenswelt. The method is phenomenological in that its intention is to achieve a more intimate understanding of one's individual lived experience of becoming a teacher. For this reason, currere is not proposed as simply a checklist or process to work through, but instead as a lifelong reflective endeavor of personal and professional growth. Similar to hermeneutic phenomenology, the purpose of Pinar's (1976) method of currere is to examine the participant's unique experience in the phenomenon of becoming an educator. Constructivist approaches, hermeneutic phenomenology and the method of currere employ data-gathering methods that collect personal reflections. Because of the possible obstacle of conducting research with van Manen's "method without techniques" (Miles & Huberman, 1994, p. 2), I opted to employ the method currere as both a guide for my research and a framework for my findings.

This study examined the experiences and reflections of five randomly-selected teacher candidates enrolled in an undergraduate secondary education program in a large Midwestern public university. Because of the depth and breadth of the examination, engaging more than five participants in the time available for the study would have jeopardized

the hope of realizing the rigor of focus that was intended. All of the participants were white and four were female. The demographics of this participant group effectively characterized the general population of teacher candidates. Statistics indicate that "for the foreseeable future, prospective teachers will continue to be predominantly white, middle class females under the age of 25 years" (Proctor et al., 2001, p. 219). Prior to embarking upon data collection for this study, I obtained all necessary clearance from the Institutional Review Board and strictly adhered to appropriate human subjects protocol at all times throughout the course of the study.

As noted earlier, the four stages of currere provide here a guide for the examination of the "story" of the participants' professional development. Pinar initially created the method of currere to be employed by a researcher as he or she engages in personal reflection. For the purposes of this study, I have modified Pinar's method to serve not as an individual endeavor, but as scaffolding for my participants' reflections upon their experiences of participating in an early urban field placement. I have made this modification for the purpose of both simplicity and uniformity. As Pinar (1976) wrote when he explicitly invited researchers to modify his method of currere: "we must be utilitarians" (p. 55). Through the work of currere, it was hoped that each participant was afforded an opportunity to achieve a heightened degree of personal growth and understanding of the way they think and feel about urban public schools. "We cannot fully and fruitfully engage in meaningful dialogue across the differences of race without doing the work of personal transformation" (Howard, 1999, p. 4). To elucidate that work, the data collected here included textual qualitative data from participants' field journals. Because "it is likely that [field journals] may contain reflective accounts of human experiences that are of phenomenological value" (van Manen, 1990, p. 73), they were the initial source of data to inform this study, and helped to frame the questions in the personal interviews. Throughout the data collection, the participants were guided to move through the four steps of currere.

Findings

Max van Manen wrote that "the purpose of phenomenological reflection is to try to grasp the essential meaning of something" (1990, p. 77). He went on to write that this task is "both easy and difficult" because it is basic human nature to try and make sense of the world, yet often the "essential meaning" of a word or idea is painfully elusive. Capturing one's lived experience, or lebenswelt, is a perpetually elusive task, yet it is one aspiration of hermeneutic phenomenological research. "An authentic speaker must be a true listener … able to listen to the way the things of the world speak to us" (van Manen, 1990, p. 111).

A common manner of sharing hermeneutic phenomenological work is through the writing of anecdotes or stories. In this study, the currere narratives I created for each participant are the result of my listening to their reflections upon their experiences. Through the recursive examination of textual representations of their lived experiences, I gathered and constructed currere narratives from the teacher candidates' field journals and interviews. The data were separated into five text sets; each participant's text was approached, read, and reflected upon as a unique and individual representation of his or her experience. Each currere narrative is 12–15 pages—far too long to include here. Given the method, it would be inappropriate to conflate them to identify themes. Using pseudonyms, here is a brief summary of each participant's currere:

Participant 1: Jill

Jill went to high school in "suburbia city;" she said her classmates were white, as were most of her teachers. Most of her understandings about diversity came from her guidance counselor—a black woman— and a college course about diversity. Before entering her first urban field placement, Jill had heard that "there were a lot of black people in the district." However, she wanted to work in an urban school so she was eagerly anticipating the opportunity to immerse in the environment. Looking back after the placement, Jill realized that she had never really been in a racially and culturally diverse environment. She hopes to teach in an urban setting.

Participant 2: Mary

Much like Jill, Mary grew up in "white suburbia, middle to upper-middle class, '*Leave it to Beaver*' families." Mary was home-schooled, so she did not have a great deal of exposure to people outside of her family and the Christian homeschooling group to which her family belonged. Her uncle teaches in an urban public school, and he has shared some of the many problems that he has faced in that environment. Going in to her field placement, Mary was quite positive that she would encounter challenging behavior issues. She had "a few misgivings … [because] the school was rumored to be in one of the toughest neighborhoods." On her first day of the placement she witnessed a confrontation between a school administrator and a student, and she was "afraid it was going to be worse than [she] thought!" In fact, by the time her field was completed, she was sad to not be going back. Mary really enjoyed the placement and the students with whom she worked. Interestingly, during this field experience Mary realized she did not want to be a teacher; she has decided to work in a career "where people need people to directly interact."

Participant 3: Kate

Kate also grew up in the suburbs with predominantly white peers. She said her high school was over-protective of students, and security was tight. Her first field experience was in a rural setting, so she was both enthusiastic and nervous about the urban placement. She said that her parents were very worried about her safety during the field placement. On her first day in the field, she reported that she was not introduced to the students "in the right way. It was a horrible, chaotic mess!" Unlike her peers, Kate had the opportunity to teach a class, but it was out of her content area and she felt it was difficult. Her cooperating teacher had a lot of negative observations about the students and Kate had a lot of negative observations about her cooperating teacher's practice. Kate said that she learned a lot about "the bureaucracy of teaching," and reflected that it seemed that the teacher had little control over the class. When she completed her field placement, Kate realized that she

wanted to work in a suburban district, but that more money needs to be put into urban public schools.

Participant 4: Joe

Joe was the only male in the participant group, and he was also the only one who did not report growing up in a suburb. Joe lived in a small, rural town that had many "extremely racist" people—including his own father (Joe did not ever speak of his mother). A non-traditional student, Joe enlisted in the Army right out of high school, which is where he first encountered people of diverse races and cultures. In the service he interacted well with his black and Hispanic peers; one motto he remembers from the Army is "you are no longer black or white, you are green." He chose to enter the field of education after he had some positive experiences teaching in the service. Joe was the only participant who was not apprehensive about his first urban field placement. He had a positive opinion of the environment that did not change throughout the experience. Joe reflected that the progress that he has made in terms of acceptance of diverse others is "not even fathomable to most people." He plans to teach in an urban public school.

Participant 5: Ann

Like many teacher candidates, Ann grew up in the suburbs and had wanted to be a teacher since grade school. Her aunt is a teacher in a local suburban school, and she gave Ann teaching materials to play with as a child. Before the field placement, Ann had negative expectations garnered from her friends, movies, and television. Like Kate, her parents were very worried about her completing field work in an urban setting. Fortuitously, her experience was positive, even though she was with a cooperating teacher out of her content area. After completing the placement Ann said she would "love to work in an urban setting." She said she wants to connect with her students and help them learn from their personal experiences.

Implications

The purpose of this study was to explore teacher candidates' reflections about urban public schools, and how an early urban field placement may or may not affect their understandings of those schools. My findings were, in some ways, consistent with the literature. Perhaps this was in part because my participants conformed to the prevailing demographics of teacher preparatory programs across the country. On the other hand, my participants were unique in that they were not as apprehensive to enter the urban field as the literature suggests (e.g.s., Brown, 2002; Foster, 2004; Ingersol & Smith, 2003; Proctor et al., 2001).

Through examination of the participants' reflections upon urban schools, as well as their experiences negotiating early urban field placements, this study has implications for those involved in teacher education and the construction and implementation of secondary early field experiences in both urban and non-urban settings. The literature addressing the construction and implementation of early field placements in any venue is scarce. Perhaps this is because early field experience is a relatively new aspect of teacher education.

One significant aspect of these findings is that not one participant was opposed to entering the urban school, even though students generally understood those schools as predominantly unpleasant places. For example, the participants often said they imagined urban schools to have more incidents of violence or student drug usage than other settings. Neither of these are conditions one hopes to find in a school setting, yet this did not dissuade the participants from having a positive attitude when the opportunity to experience an urban school was presented. By scaffolding the teacher candidates' reflections on their own understanding through journaling or class discussion, they are made conscious of the lens through which they will be first experiencing the field. Addressing notions that are factually inaccurate—such as one participant's idea that teachers are always paid less in urban than in non-urban settings—prior to entering the field may serve to reduce their anxiety or facilitate a more realistic experience, as well as provide a focus for reflection during and after the field experience. For example, to help mitigate the inaccurate pre-understanding, I would have suggested that the candidate speak

to a cooperating teacher, or other teachers in the building, about how salaries compare from district to district.

To further prepare teacher candidates to enter an urban field placement, particularly those who are unfamiliar with urban settings, it may be beneficial to not only address their own ideas, but also to acknowledge and deconstruct the media's portrayal of urban schools. Every participant in this study cited news reports, television shows, and/or movies as one source of their pre-understanding of urban schools. By inviting these societal influences into the classroom and examining them more closely, teacher candidates may be more apt to separate the realities of urban public schools from the often negative or romanticized representations of that milieu. To further compare fact and fiction, they might gather information about urban public schools from professional journals or trade books and draw their own conclusions about what is or is not accurate in various representations.

In addition, the participants' experiences in this study would indicate that it is not as beneficial to place teacher candidates with practicing teachers who possess either very little classroom experience or have prevailing negative opinions of their profession or students. Cooperating teachers with little classroom experience, the data suggest, may be less inclined to encourage and support teacher candidates to take an active role in the classroom. In this study, one participant's cooperating teacher seemed to view the candidate as a sounding board, and frequently shared profoundly negative ideas about her students. This only served to reinforce the candidate's prior understanding that urban public school teachers are "drained, frustrated, and overworked."

This study also presents several implications for future research practice. The method utilized here is unique in that it employs Pinar's (1976) method of currere in a study with multiple participants; as noted earlier, there are few studies to date that have used this methodology. In keeping with the work of Milam (2008), the findings of this work point to the notion that currere is a useful lens through which to consider and explore individual experience. It provides the researcher with a structure or process to unpack experience, and then re-place it as a narrative whole. As explained earlier, Pinar's currere was slightly modified for

the purposes of this work. Some of the conclusions drawn in this study shed light on how the method might be useful in teacher preparatory programming.

This study also points to value in scaffolding Pinar's (1976) method of currere in teacher preparatory programs. The participants all indicated that engaging in the method of currere helped them to more clearly reflect upon the people and events that have influenced their journey of becoming educators. Currere may serve as a valuable tool for teacher candidates to critically examine their career paths. There is much to be learned about oneself by participating in this type of reflection. However, there was insufficient time available in this study for the participants to truly reap the benefits of the method as Pinar intended.

Insightfully, several participants suggested that the creation of a currere narrative should begin early and be sustained throughout a teacher preparatory program. At the onset of their professional journeys, it may help teacher candidates confirm or clarify their career goals and even help determine if teaching is indeed how they desire to spend their professional lives. This would best be accomplished by employing Pinar's actual steps rather than the adaptation of the method utilized here. Currere is intended to be a more individualized and reflective experience than it was in this study. Reflection, like that scaffolded in the method of currere, is a valuable instrument for effective practice. Another added benefit of creating an ongoing currere narrative as Pinar intended and scaffolding that creation throughout one's journey through a program is to immerse teacher candidates in an ongoing reflective experience.

Hermeneutic phenomenology (van Manen, 1990) was the most appropriate method with which to approach this study. The narratives, textual representations of phenomena necessitated recursive examination to truly begin understanding their meaning. However, hermeneutic phenomenology did not offer the kind of organization needed in this study, so I turned to Pinar's work to meet that need. To date, few other studies have examined the implementation of Pinar's method in a secondary teacher general methodology course. In a similar study, Milam (2008) utilized the context of currere to explore the experiences of six white teacher candidates working with African-American students. Currere

was used "to better understand how, when operationalized in the context of educational research, a researcher might realize a more complicated conversation with oneself and others" (Milam, 2008, p. 189).

It is important to reiterate that the method of currere was adapted to serve this purpose. In fact, Pinar designed currere to be completed by oneself and for oneself, not by someone else. A second divergence from Pinar's method was the creation of the "currere timelines." These allowed me to maintain a clear and organized view of participants' experiences throughout the study. While these two modifications served me well, the method of currere proved far more of a point of interest to the participants than I previously expected. With this in mind, I would discard the changes that I made and instead focus more energy into facilitating the participants' creation of their own currere narratives as Pinar intended.

The stories of these teacher candidates point to the notion that teacher candidates' understanding of urban public schools is influenced by their peers who have already completed their early urban field placements and their families. In future study, I believe it would be informative to seek and gather more detailed information about the participants' families and childhood communities in the regressive step of their curreres. In conclusion, I hope that this study has shed light upon the unique experiences of five teacher candidates as they navigated early urban field placements. I also anticipate that, after listening to their thoughts and feelings, I will better serve other teacher candidates. Seeking a deeper understanding of how teacher candidates approach and navigate the horizons of urban public schools can lead us to discover ways to best serve as reflective guides along their professional journeys.

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Facebook and remedial reading: Blurring borders of self, others, and multimodal texts

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Abstract

This study describes using Facebook as a component of a remedial reading course at a community college. It also examines what happens as the course instructor and students interacted with each other and with multi-textual information on Facebook. We argue that online social networks can provide a framework for student interactions with self, with others, and with information. The case study presented here explores shifts in possibilities authored by reading remediation students who re/mixed shifting conceptions of texts and reading.

Reading in academic contexts involves a move beyond comprehension to critical analysis and critique. In college remedial reading, where this move must be explicitly modeled, we can lay foundations for future learning as students develop skills that not only aid comprehension, but also support the construction of knowledge in a shared discourse community in cyberspace. Knowledge in this context is more than mere access to information; it is understanding what to do with information and interacting with the understandings of others. Learning is more than gathering information (Lankshear, Snyder, & Green, 2000). It is developing and practicing knowledge in a search for coherence among the complexities and struggles of experience. Therefore, in addition to vocabulary and comprehension skills, reading remediation must include

spaces for learners to collaborate, construct, discuss, and critique under-standings as they interact with multimodal texts.

In this chapter, we examine the evolution of a remedial reading course that used Facebook as a framework for student interactions with self, with others, and with multi-textual information. We also explore the possibilities and experiences authored by reading remediation students who re/mixed shifting conceptions of texts and reading.

~~Remedial~~ Reading

Reading remediation is in a sad state. According to the U.S Department of Education, approximately one third of all first-year col-lege students in the nation have taken at least one remediation course (Luzer, 2011). Other data suggests that number is closer to 40%, and at community colleges, the percentage increases upwards of 60% (Vandal, 2010). For graduated high school students who are required to take remedial reading courses in college, the U.S. Department of Education reports that only 17% earn a bachelor's degree (Associated Press, 2010). Remedial reading students are also more likely to prema-turely exit their studies within one year of taking the remedial reading course (Pearce, Thompson, & Donaldson, 2009). Vandal (2010) con-tends that the lack of widespread instructional innovation in the reme-dial classes contributes to this trend, but digital technologies paired with innovative instructional strategies can increase students' successes.

We want to emphasize this caveat. The key to student success is pairing digital technologies with innovative instructional strategies. Digital technologies are neither inherently good nor bad (Carr, 2009); they are merely tools that can facilitate a variety of interactions that benefit students. Teachers have the responsibility of designing an environment that fosters reciprocal relationships between students and content made available through technology. Doing this avoids the devel-opment of a technocracy where education is led by *teaching machines* to achieve imperialistic efficiency and rationality (Marcuse, 1941) at the cost of possibility and transformation.

If the classroom becomes a technocracy, then as Mitra (2010) con-tends, teachers who can be replaced by computers should be replaced

by computers. However, teachers have more important roles than to be mere vessels or gatekeepers of information; they can facilitate and model interactions with others to provide opportunities for the construction of knowledge. Students in remedial reading need such transitional support (Pearce, Thompson, & Donaldson, 2009) to critique information and build understandings. In this setting, digital technologies can be powerful, providing students with access to vast amounts of information presented in countless forms by people from across the globe while supported by a teacher who models and encourages critical reflection.

Social Networking

Alvermann (2008) emphasizes that digital technologies are here to stay, and "teachers, teacher educators, and researchers cannot turn their backs on the inevitable" (p. 17). Online social networking is a central activity in the lives of young Americans, with 93% using the Internet for social interactions (Lenhart, Madden, Macgill, & Smith, 2007). By using social networks in instruction, we can meet students where they dwell and create meaningful learning experiences together, addressing social and academic concerns.

Online social networking is becoming an increasingly important component in considering digital technologies in education. Facebook became the most widely accessed website in 2010, accounting for 8.93% of website visits in the United States, beating Google for the first time (Erwin, 2010). Furthermore, Facebook has over 500 million users, with more than half living outside the United States, and that number continues to rise (Facebook, 2011).

As we write this chapter, the possibilities and dangers of social networking are being played out in visceral ways across North Africa. Youtube videos and Facebook Pages like *We Are All Khaled Said* revealed atrocities carried out by oppressive regimes igniting social unrest in various countries (Smith, 2011). The outcomes of those events are still unknown, as Tunisia, Egypt, and Libya deal with revolutions enflamed by Twitter, YouTube, and Facebook. These extreme examples of the power of critiquing and sharing knowledge in online social networks reflect the potential for change through such interactions.

In this country, other stories are being told, including cyberbullies in digital playgrounds who intimidate and harm their peers. These online abuses and misbehaviors have led to serious consequences, even suicide (U.S. Department of Education's Office of Safe and Drug-Free Schools, 2009). Presentations of self in online social networks have become crucial contexts for the development of the offline self (Hull & Stornaiuolo, 2010). Our point is that social networks powerfully affect the lives of the individuals who inhabit them. Instead of ignoring such online spaces, we argue that using social networks to create responsible, civic and academic behaviors both and online and off is helpful and necessary in this digital era, especially as struggling students transition into higher education.

In educational contexts, digital technologies can provide space for students to think about information in multimodal, nonlinear formats that emphasis various points of view (Barbas, 2006). Learners have more time for critical reflection and communication (Browne, 2003; Whip, 1999), and online communication allows students to actively discuss their understandings of material leading to increased academic outcomes (Chen, 2007). Moreover, online spaces privilege students' background knowledge and social realities, empowering students as they engage each another in academic work.

Facebooking in Remedial Reading

What happens if we acknowledge other forms of discourse and teach in the digital worlds inhabited by individuals going about their lives outside the confines of the classroom? By *teach*, we mean provide the opportunity for students to interact with texts and with each other. Stewart (2009) describes Facebook as a tool to enhance literature circles by fostering collaboration as students read and discuss books. In Stewart's (2009) study, Facebook facilitated literature circles by enabling students to meet more frequently in cyberspace.

In remedial reading programs for college students, Facebook increases connections between students and instructors (Bowers-Campbell, 2008). Bowers-Campbell (2008) suggests this connection might lead to improving low self-efficacy and self-regulated learning. Here,

we explore Facebook as a component of a remedial reading course at a community college, in which the concept of text is expanded beyond the book to incorporate multi-modal forms. Our goal is to develop an understanding of how students perceive social networking as a support structure during their remediation/education. We clarify key terms used in this exploration of Facebook in Figure 1.

Figure 1
Facebook terminology

- Discussions – An interactive location within a page where friends and fans can read, comment on and post topics.
- Friend – A Facebook member granted access to a profile.
- Fan – A Facebook member who likes a page.
- Like – A way to give positive feedback or to connect with content and Pages on Facebook. Connections are displayed in profiles and friends receive news feeds about connections. Liking a page enables the page to post content into a member's News Feed and send messages.
- News feed/homepage – The location where Facebook members view postings from friends' profiles and liked pages.
- Profile – A Facebook member's personal account used to communicate with members identified as friends.
- Page – A page representing organizations, institutions, businesses or other entities, in this case, a class with open access to all Facebook members. Pages broadcast information in a public manner to Facebook members who choose to connect with them.
- Wall – An interactive location in Facebook where members can read and post information on profiles and pages.

Description of Facebook Page and Activities

The remedial reading instructor and students created a Facebook page in the spring semester of 2011. This page was a medium for students to interact with one other and the instructor outside the confines

of the classroom on various topics, creating an ongoing and shifting dialogue. Open to all Facebook members, the page enabled interactions between participants in the course while keeping personal profiles of the instructor and students private. Rather than becoming Facebook friends with the instructor, students became Facebook fans that liked the course page, allowing everyone to connect. Postings on the page's wall went to news feeds and home pages of all fans. The ability to like the page was not limited to Facebook members taking the remedial reading course.

The instructor and students used the page's wall to communicate during the semester. Rather than email, the instructor posted announcements, class assignments and reminders to students on the wall. Students saw these postings on their news feeds and were able to provide feedback and express concerns.

In discussions, the instructor posted multi-textual information for student to read, reflect on and discuss. These texts included YouTube clips, news articles, and electronic books that introduced instructional themes and current events of interest. Students posted understandings and perspectives as they read. They also read and responded to ideas shared by other students and the instructor. Additionally, students used online discussions to present and guide interactions on material they found meaningful. Facilitating the development of critical comprehension and academic reading skills, the instructor and students shared ideas, understandings, and connections. These dialogues were often continued in the classroom.

Discussions were also used to facilitate small group interactions during class. After reading material, small groups discussed understandings and used smart phones to post responses in real time to discussions that were projected on the class screen. While each small group worked, they could read and incorporate the ideas of other groups into their understandings. This allowed work in small groups while incorporating ideas from the whole class. The instructor could also quietly interject and model without interrupting conversations.

Method

The purpose of this preliminary case study is to explore shifts in possibilities authored by reading remediation students who re/mixed shifting conceptions of texts and reading as they interacted on the Facebook page. Questions guiding the research are:

1. How do remedial reading students describe the role of a Facebook page in their remediation course?
2. How does using a Facebook page in remedial reading affect the way students interact with each other and information?

A case study is particularistic, descriptive, heuristic, and inductive (Merriam, 1998). The case in this study is a remedial reading course at a community college that uses a Facebook page to support student interactions. The students in the course were required to take remedial reading due to their reading scores on either the COMPASS or THEA, assessments used for college placement in Texas.

Data were collected over a four-month period in the spring semester of 2011. We used a survey and group interviews of students, artifact data from the Facebook page, and a researcher journal to explore possibilities within online social networking for reading remediation.

The preliminary survey was conducted in the early stages of the research to guide further questioning during group interviews and analysis of the Facebook page as an artifact. Two survey questions of particular interest due to the students' responses were:

1. How much did your Facebook friends outside the class comment about your class discussions on Facebook?
2. How much did the online components of this course change the way you interacted with others in class?

Follow-up group interviews were open-ended, and attempts were made to provide students with the space to use their own words and guide the interview process, as suggested by Stake (1995) and Brenner (2006). Key questions during group interviews were:

1. Describe the conversations you had with Facebook friends outside of the class concerning course topics.
2. In what ways did the Facebook page change your face-to-face interactions in class?
3. Describe how you worked on the Facebook page and what you thought about.

The purpose of group interviews was to bring the various students' experiences and perspectives into contact (Maykut & Morehouse, 1994). Open-ended group interviews enabled students to discuss their experiences in the Facebook page and react to the perspectives of one another.

Viewing the Facebook page as an artifact and keeping a research journal provided different sources of data for triangulation. The Facebook page was an artifact in the sense that it was created by people and had traces of cultural meaning making (Anderson-Levitt, 2006). As a data source, it did not disturb "the natural flow of human activity" (Hatch, 2002, p. 119).

The research journal was a place to interact with ideas and experiences formed during the research process. As Cahnmann (2003) suggests, it allowed us to jot down and work with connections and reflections constructed as we went along. This journal was kept for the duration of the study as a place to record thoughts and feelings relative to the data. Using four types of notes identified by Bhattacharya (2009), reflective notes in the research journal chronicled thinking, experiences, and perceptions throughout the research process. These notes included:

1. Organization, logistics and thoughts concerning data collection
2. Our emotions as a researcher dealing with feelings, doubts and assumptions about self, the participants and the research
3. Our evolving understandings and assertions, as well as the limitation and possibilities within understandings
4. Decisions concerning the research process such as selection of data, ethical issues, data representation and other issues perceived during research

These notes kept track of preconceived and emerging assumptions and understandings. Because of the recursive nature of case study research (Merriam, 1998), new questions and issues raised in the journaling process influenced data analysis.

Analysis of data was an intuitive yet systematic and iterative process examining students' perceptions of the role of Facebook in a remedial reading course. We compared and contrasted data, seeking patterns within the data and grouping similarities (Merriam, 1998). Inductive category coding as described by Goetz and LeCompte (1981) broke down data from the interviews, artifact, and research journal into units of meaning. We classified similar meanings into named, coded categories (Charmaz, 2006). From the coded categories, we formed patterns and themes to develop a deeper understanding of the issues being studied. Four important threads of experience were revealed.

Findings

Students identified four important shifts in communication and thinking behaviors as they interacted on the remedial reading course's Facebook page. These shifts involved: (1) how they communicated with the instructor and other classmates, (2) how they interacted with others from outside the class, (3) how they worked and critically reflected on their online behaviors, and (4) how they interacted in face-to-face conversations in class after discussing topics online.

The Facebook page facilitated communication between the instructor and students. Instead of relying on email, course communications took on more conversational tones on the page's wall. Students indicated they were more likely to receive important messages posted on the wall. It was also easier to provide feedback, as students posted notes and *liked* certain ideas. For example, the instructor posted "bring your Frederick Douglass books to class, tomorrow we will discuss chapter 2," to which one student asked, "Do you want us to prepare for a lit. circle like last time?" Three others *liked* the post.

Also, because dialogues in the Facebook page were displayed on students' news feeds as well as the news feeds of their friends, conversations spread beyond the confines of the class to others in cyberspace

who were interested in topics we discussed. Students interacted with an expanded range of perspectives regarding information. For example, one student posted a YouTube clip that interested his previous teachers from high school. He said, "My old English teacher wanted to know where I found that clip and what it was for. We began talking about what it meant for the future." In another case, a soldier in the course discussed leadership and Shakespeare with his fellow soldiers in various military bases across the world.

Additionally, students' online academic behaviors shifted. Most students stated that they were already using the Internet for academic purposes, mostly researching online and emailing teachers and class-mates. On Facebook however, they began to have online conversations over academic topics, and they looked for meaningful topics to post. One student said, "Now, when I am on YouTube or something and I see something interesting, I think about this class. I start thinking about things to say." YouTube and other Internet sites became sites for reflection. Rather than researching in isolation, students shared their thoughts with others as they found information of interest.

The final change identified was that students brought Facebook interactions into face-to-face class conversations. This was especially important for students who felt uncomfortable speaking in classroom settings. A student commented, "I am shy and don't usually talk much in class. After talking online, I felt like I knew people and was more comfortable expressing myself." Alone on Facebook, students were empowered to share their understandings. When conversations continued in the classroom on these same topics, they interacted in new ways with ideas they felt had already been validated.

Discussion

Through communication in Facebook, individuals were able, as Browne (2003) explains in discussions of the Internet, "to articulate their understandings and try them out with others, thus building on their knowledge using the social support of the virtual community" (Browne, 2003, p. 247).

As we discussed earlier, remember that Facebook is just the tool. Only with the acknowledgement, discussion, and critique of discussions and arguments made in the social network does learning take place. For this to occur, the instructor's role is to forge a community of mutual learners who experience diverse discourses. Here, the border of the class is blurred as learners shared understandings with each other, with the instructor and with other individuals who interacted with the class in discussions on Facebook.

As discussed in the previous sections, students began using their time online to critically reflect on what they read and share those reflections with others. This new behavior spread beyond the class to include other Facebook friends. Individuals shared understandings of multi-textual information, making sense of their experience and new discourses. In these spaces and using their own words, students create new narratives as critical readers and thinkers.

When teachers support appropriate risk-taking behaviors and encourage creative and independent thinking in the classroom, students' overall engagement in literacy activities increases (Bogner, Raphael, & Pressley, 2002). Sharing understandings of texts is a risk-taking behavior encouraged by Facebook. Using Facebook as described above also breaks the initiation–reply–evaluation pattern described by Cazden (1988). Instead of asking students questions and evaluating students' responses, in this setting, the instructor often observed students leading discussions with no evaluation provided from the instructor.

We must be careful that in using Internet sites like Facebook to broaden the scope of social interactions in education, we do not simultaneously favor corporate interests (Apple, 1992, 2004; Lessig, 2002). In 2002, Lessig worried that possibilities of creative freedom and communication through Internet was being "replaced by a reality of many, many ways to buy things and many, many ways to select among what is offered" (p. 7). The students in this study seem to indicate that the use of Facebook in reading remediation expanded the way they thought and worked while logged in. They seemed to suggest that they moved away from using the Internet as a form of consumerism and began to reflect critically on a myriad of issues going on around them.

Conclusion

In this chapter, we described and explored a Facebook page used as a component of a remedial reading course. Although this is a preliminary study, the implications for future studies are of interest. Three areas that need further study are: (1) exploring what happens on students' personal Facebook profiles as they interact in a college course's Facebook page, (2) examining students' subsequent interactions in the college course's Facebook page after they have completed the course, and (3) investigating the interactions of diverse student populations within the class. The Facebook page examined in the case study provided the space for teachers and learners to interact one-on-one, in small groups, and as a class. Others from beyond the walls of the classroom entered into discussions, and students shared ideas developed during conversations in class with others. The borders of the class expanded and blurred, becoming permeable as dialogue involved the instructor, students and others inhabiting the Internet.

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Texting fluency:
The new measurement of literacy proficiency?

Evan Ortlieb

Abstract

Digital means of communication such as text messaging are as popular as voice communication with students of all education levels today. Although oral reading fluency is a commonly used measure of proficiency, few measures of digital communicative practices exist. This investigation centers on determining whether a relationship exists between electronic texting fluency (ETF) and oral reading fluency (ORF). Findings suggest that texting proficiency is a skill independent of other factors like ORF, and therefore, educators must provide opportunities to develop digital literacies to adequately prepare students for success.

Schools increasingly use oral reading fluency (ORF) as a means to assess students' reading proficiencies. Quick and simple assessments through timed readings provide ORF data, but may be less relevant in the digital information age in which digital literacies prevail (Schmar-Dobler, 2003). Measuring those digital proficiencies could provide meaningful data to better inform instructors about each student's developed skills (Ba, Tally, & Tsikalas, 2002; Calvani, Cartelli, Fini, & Ranieri, 2008). David Sarnoff stated, "The products of modern science are not in themselves good or bad; it is the way they are used that determines their value (McLuhan, 1967, p. 26). Receiving and distributing information in an efficient manner is essential to effective communication, and one of the largest current uses of communication is the Short

Message Service (SMS), also known as texting. Focus has shifted from merely how swiftly one can read and write to how effectively can one acquire information digitally and communicate through various media. The purpose of this study is two-fold: 1) describe how digital literacies are integral components within effective literacy instruction, and 2) investigate whether electronic texting fluencies can be correlated to oral reading fluency.

Students are living in a digital world, yet pen, paper, and print still dominate classroom environments. Although students are engaging in more and more technology use, schools do not generally align their curricula or instruction to prepare students to use these tools. Instead of teaching students the applications of technology in the classroom, educators frequently shun them to avoid potential misuses, which are presumed to outweigh the advantages. However, in the testing world, technology is acceptable because it minimizes teacher work. This contradiction is startling and does not ensure that students are prepared with digital literacy skills.

Instructors continue to rely upon traditions and other sanctions to meet literacy requirements instead of preparing students to be successful, creative, and innovative thinkers able and ready to solve problems using digital literacies. Dalton and Proctor (2008) state:

> We are faced with an urgent need to expand our understanding of print text, which is linear, static, temporally and physically bounded, often with clear purpose, authorship and authority, to reflect the characteristics of digital text, which is nonlinear, multimodal with a heavy visual orientation, interactive, unbounded in time and space, with murky conveyance of authorship and authority. (p. 297)

The gap in achievement will continue to expand so long as teachers do not equally expose, teach, and develop their abilities to seek, organize, understand, evaluate, and create information (National Center for Research on Teacher Learning, n.d.).

Theoretical Framework

In the reading classroom, oral reading fluency in the primary grades is used as an indicator of reading proficiency throughout elementary schools nationwide (Baker, 2002; Worthy & Broaddus, 2002). Hosts of testing systems like DIBELS have been created to help teachers measure their students' abilities. With that said, oral reading fluency (ORF) is just one facet of many components of reading competency. Correlations between oral reading fluency and comprehension (Cook, 2003; Fuchs, Fuchs, Hosp, & Jenkins, 2001; Riedel, 2007; Roberts, 2005; Spear-Swerling, 2006) have been made. The rationale is that someone who spends less time decoding words will read faster and in turn, focus more on the content of the passage rather than the mechanics involved in reading (Logan, 1997). Yet, studies directed towards linking oral reading fluency to digital literacies have not commenced. The primary investigator pondered whether correlations could be made between oral reading fluency to electronic texting fluency (ETF).

Five years ago, the primary investigator began tinkering with technological applications for use in elementary school classrooms. Using a Palm mobile device equipped with a digital camera, he took pictures, microblogged, and uploaded events from class to a website from which students and parents could keep track of goings on. The website also provided students with recognition for which they felt proud to have completed science fair projects, literary skits, and history presentations. These primitive applications were unique in the school at which he worked; however, today these approaches are still useful but seem equally outdated. Educators must adapt as technology changes so we can teach our students the uses of amazing new technologies that bring learning to the classroom.

Communication is instant; patience is a quality of the past. With high-speed Internet connections, 4G wireless broadband networks, Google searches, and electronic SMS text messaging, ordinary citizens expect to send and receive information rapidly and without delay. Before the information age and digital literacies, massive amounts of time were needed to conduct research in libraries, hold face-to-face meetings, and hand out paper copies of information around the office or

classroom. Now, emails, text messages, and web-based social network forums are some of the most popular forms of communication in use (Labbo et al., 2003).

Educators have not been apprehensive about students' using technology in school, as long as they specify the technologies and how they are to be used. Yet, texting is the most popular use of telephones by adolescents today (McKay, 2003). Texting fluency can be defined as one's ability to send electronic text messages, often from one cellular phone to another. Like reading fluency, which is one's ability to read text accurately and with a certain level of speed and expression, texting fluency allows one to access information, which in educational environments would prove tremendously advantageous for those who are more fluent than those less fluent. Snyder and Bulfin (2008) urge that English classrooms require not only verbal literacies, but also visual and audiovisual literacies for success.

These constraints do not allow for optimal utilization of the tremendous functionality of technology like electronic texting via cellular telephones. Wood et al. (2009) assert that text messaging provides students with additional interactions with written words, most often in a social environment free of academic criticism. This means that students do not have specified constraints on their writing (or texting in this case). Exposure to misspellings does not necessarily have negative effects on the reader's subsequent spelling acquisition (Dixon & Kaminska, 2007; Ehri, Gibbs, & Underwood, 1988). Wood et al. found that text messaging positively affected children's phonological awareness and spelling development. The power of this function should be harnessed for application in the classroom, instead of it being dismissed as it is by many educators of all levels.

Educational Applications

Although it is common knowledge that cellular devices have capabilities to be used as cameras, audio and video recorders, calculators, calendars, and text messaging centers, the educational applications are not as apparent as the functions of the devices (Hagood, Stevens, & Reinking, 2003; Lewis & Finders, 2002; O'Brien, 2001). Some educa-

tional functions include the following: build class blogs, assemble media albums, create multimedia reports, answer quizzes and exams, test reading comprehension, solve math problems, conduct experiments and comparisons, and find reference material and information.

Students' texting proficiencies could factor into how quickly students can acquire and disseminate information to others. This electronic texting fluency (ETF) could have either far-reaching positive outcomes or detrimental results, depending on the students' levels of proficiency. In 2008, a Harris interactive research study reported that four out of five teenagers carry cellular phones. Texting is a form of data transmission that is here to stay, so we might as well teach students to use it as a learning device instead of viewing this form of communication as purely personal quests of informal language transmission.

The following is a three-point argument of how electronic texting can be an investigatory tool in the classroom: 1) efficient and effective communication; 2) gain intelligence on topics of importance; and 3) Google Docs as an educational tool. Technological advances make it possible to communicate instantly with people via computers and cellular phones. Some teachers are now replacing pencil and paper assignments with electronic forms of communication, such as web logs, e-mail portals, and various forms of instant messaging (Edutopia, 2008). Teachers use web logs, often referred to as "blogs" for short, to post public class assignments, so they can view immediate feedback as soon as students post it. Blogging sites allow teachers to see all students' responses on a single page instead of collecting multiple copies of handwritten responses or using an alternate response system, such as e-mail (Center for Implementing Technology in Education, 2008). Teachers use blogs to post homework assignments, notes from discussions or readings, in-class activities and assignments, video lectures, and any other classroom material to be made public (Coiro, 2003; Green, 2008; Leu, Jr., Kinzer, Coiro, & Cammack, 2004). The Internet offers a number of safe blogging sites for teachers and students to use in the classroom. Students' personal weblogs are largely interest-driven and intended to attract readers who have the same or similar interests and allegiances as the bloggers (Lankshear & Knobel, 2006). McLuhan's

(1967) sagacious judgment that the 'medium is the message' supports the belief that digital environments are grounds for collaboration, and in turn, learning. Indeed, new technologies have disruptive impacts, (e.g., high speed Internet ► dial-up Internet, social networking ► chatting, library electronic catalog ► card catalog), but they leave text, or words, indispensable. The potential applications of new literacies must be investigated. Media technology is an extension of one's self like a phone or e-book reader, but the classroom applications of such devices are still in their infancy.

One of the most efficient forms of nonverbal communication is a short message or instant message service (DuVall, Powell, Hodge, & Ellis, 2007). Although e-mail services allow immediate response, users have to open a separate window to send a new message, reply to a message, or read a newly received message. Instant messaging (IM) services allow the user to use one window to send and receive all messages. Although IM services do not allow students to enter a large amount of information, they can create short summaries, questions, or responses. For example, teachers allow students to use IM and SMS for summarizing formal and informal literature or explaining brief directions. They can post their texts to a public classroom website using Internet access on their cell phones, or text directly to one another using text messaging (Bernard, 2008; Kolb, 2007). Some teachers use texting as a way to teach students about formal and informal writing. Electronic dialogue journals are used to develop students' functional and structural language knowledge (Staton et al., 1988).

Text message users often develop their own informal, shorthand language, so they can communicate longer messages using a fewer number of characters. Teachers allow students to take examples of informal texts they would send to their friends and translate them as a class or individually into a formal sentence that is mechanically and grammatically correct (Carvin, 2006). Activities of this nature help to alleviate the use of text messaging lingo on graded assignments and assessments.

Instant messaging is the Internet equivalent to the short messaging service (SMS) provided on cell phones with text messaging capabilities. Both allow users to receive messages immediately. Both instant mes-

saging and short messaging services have created alternative ways for teachers to hold class discussions on required reading or other in-class assignments. Students may use trusted instant messaging sites, such as Google's G-chat or their cell phones' text messaging service, to post discussion questions and responses to a trusted site or directly to one another. Teachers often prefer to use instant messaging services over text messaging because cell phone companies charge for using their short message service (SMS). Regardless of which device is used, immediate electronic communication methods are proving an effective way to get students more involved in class discussions (Bernard, 2008). Using technology can help reticent students share their ideas and opinions without having to speak in front of their classmates. For example, one 4th grade teacher utilized these technologies with English language learners. She asked them to write their own questions about a required piece of reading for one another, prompting them to text the questions and answers to the entire class instead of writing them down. She found that not only did she have more responses than she had ever received from oral discussions, but that students actually provided higher quality questions, requiring their classmates to reflect, contemplate, and provide detailed answers. She also found that students who normally choose not to participate in class discussions submitted up to 10 questions and responses (Bernard, 2008).

There are numerous uses of information and communication technologies (ICTs), but are those proficiencies related to students' reading abilities? Several studies have positively correlated oral reading fluency with comprehension of texts (Geller & Tindal, 2004; Shapiro, Solari, & Petscher, 2008), based on the notion that less time spent on decoding allows the reader to more clearly focus on content. The investigator inquired whether the same success in oral reading fluency could translate to proficient texting abilities. Perhaps less time decoding would allow for faster texting of electronic messages using a cellular phone. Alongside the null hypothesis is that oral reading fluency and electronic texting fluency are not significantly related. The second focus of this study involved assessing adolescent and adult students' proficiencies

in electronic texting fluency (ETF) and oral reading fluency (ORF) to determine possible relationships between the two measurements.

Methods

Participants

One hundred and fifty students enrolled in undergraduate and graduate studies at one public institution of higher education in an urban area of the southeastern United States were included in this study; participants were selected based upon their availability on testing days on this campus. Of the 150 students who began the process, 127 successfully completed the steps necessary for inclusion in the study. An equal distribution of white and black students was selected for participation, as well as an equal number of male and female students. White and black students comprise the greatest percentages of all races at this institution. Participants represented all classifications, including freshman, sophomore, junior, senior, and graduate students.

Students were informed of the proceedings in accordance with the Institutional Review Board (IRB) guidelines, signed a consent form, and completed both portions of the research study. Any participants whose information could not be verified, or who did not complete both the texting and oral reading proficiency measures, were excluded from final data analysis.

Procedures

Three other investigators were trained by the primary investigator to proctor assessments to the participants. All four researchers partook in 10 preliminary practice sessions in an attempt to increase the inter-rater reliability of measuring oral reading fluency and electronic texting fluency. These measurement estimates of inter-rater reliability are advantageous as long as there is sufficient connectedness (Linacre, 1994; Linacre, Englehard, Tatem, & Myford, 1994) across the judges and ratings, in which case it will be possible to directly compare judges. The preliminary research revealed high consensus

(percent agreement = 99%) and consistency estimates (Pearson's
$r = 0.99$) of inter-rater reliability (see Table 1).

Students' descriptive information was recorded and preserved in
an electronic database. This information includes their sex, race, and

Table 1
ETF and ORF scores for calculating the consensus and consistency estimates of inter-rater reliability

Participants	Investigators			
ETF (WCPM)	A	B	C	D
1	31	31	31	31
2	22	23	22	22
3	13	13	13	13
4	41	41	40	41
5	27	27	27	27
6	21	21	21	21
7	18	18	18	18
8	36	36	36	36
9	35	35	35	35
10	46	46	46	46
ORF (WCPM)				
1	232	231	232	232
2	189	190	190	190
3	227	227	227	227
4	250	249	250	250
5	219	219	219	218
6	259	259	259	259
7	267	268	268	268
8	149	149	149	149
9	178	177	178	178
10	201	201	201	201

classification. Next, the researcher allotted one minute for the participant using his or her personal cellular phone to text a scripted passage at the 8th grade level in a controlled environment free of auditory and visual distractions. Students were told to text as quickly and accurately as possible. All miscues would not be included in the words correct per minute (WCPM) calculation. Capitalization and punctuation were not required, but words and dates would have to be typed out in their entirety. Participants used their typical mode of texting, whether it was regular typing or one inclusive of predictive text capabilities (T9). The message was then checked for accuracy, and the number of correct words was totaled and recorded.

Then, the examiner issued an assessment of oral reading fluency, where the participant was given a separate 8th grade leveled passage from which to read for one minute. Eighth grade passages were chosen based on two factors: 1) They should be at an independent level for most collegiate students, and thus, participants would not spend undue time decoding the words; 2) many periodicals are written at this reading level, appealing to broad audiences. Errors of omission, pronunciation, or substitution that were not self-corrected were deducted from the total number of words read in the interval. The number of words correct per minute was recorded, completing the assessment process.

Results

The investigation into ETF and ORF of 131 collegiate students at one university yielded data that was then filtered via sex and race, providing further insight into proficiencies of four subgroups (black female, black male, white female, and white male). The mean oral reading fluency scores (WPCM) of black female participants (M = 214.6; SD = 41.3), black male participants (M = 214.4; SD = 34.5), white female participants (M = 225.6; SD = 32.9), and white male participants (M = 214.6; SD = 29.1) were nearly identical except for the white females, while the standard deviations varied considerably (see Table 2).

Black females showed more variability than black males, and black males showed more variability than white males. A one-way ANOVA was computed comparing the oral reading fluencies (ORF) of each sub-

Table 2
Means and Standard Deviations for ETF and ORF of subgroups

Variable	Male		Female	
	Black	White	Black	White
N	32	32	37	30
ETF (WCPM)				
M	27.2	26.4	25.7	29.5
SD	11.2	9.8	10.8	8.1
Range	3–48	4–45	3–47	10–47
ORF (WCPM)				
M	214.4	214.6	214.6	225.6
SD	34.5	29.1	41.3	32.9
Range	166–295	160–279	94–324	142–279

group. No statistically significant difference was found ($F(3,127) = 0.77$, $p > .05$) between the four subgroups.

Results from the electronic texting fluency portion of the study indicate that white females' scores (WCPM) ($M = 29.5$; $SD = 8.1$) accounted for more than two additional words correctly texted per minute, and also had the smallest standard deviation when compared to other subsets of the overall population (131). The second most proficient texters were black males ($M = 27.2$; $SD = 9.8$) followed by white males ($M = 26.4$; $SD = 9.8$) and black females ($M = 25.7$; $SD = 10.8$). Texting rates varied from 3 to 47 words correctly texted per minute. A one-way ANOVA was computed on electronic texting fluency (ETF) of each subgroup. No statistically significant difference was found ($F(3,127) = 0.85$, $p > .05$) between the four subgroups.

Data analysis also included transforming raw scores into standard scores (z-scores) to create a common scale for determining possible relationships between electronic texting fluency and oral reading fluency proficiency rates of collegiate students. Among participants (N = 127), there was no statistically significant relationship between oral reading proficiencies and electronic texting fluencies (r = .203, p< .05) within the entire group. Analyses of subgroups revealed similar findings between ETF and ORF in all four subgroups.

Discussion

While no significant relationships were found between and within the population's ETF and ORF, electronic texting fluency and oral reading fluency are both factors in academic proficiency. Disparities in electronic texting fluency (ranging from 3 to 47 correct words per minute) between participants may signify that some collegiate students partake in texting activities more often than others based on factors such as interest, access, familiarity, and popularity of texting within social networks.

The null hypothesis was confirmed; there was no significant relationship between the two measures and in turn, it became evident that texting is a separate entity—a skill that can be mastered without regard to one's level of oral reading proficiency. Practice—much like learning to type—and proper instruction are prerequisites to increasing the speed at which one can send a text message. Classrooms that embrace this technology need to refine their instruction to allow opportunities for students to interact with the technology, send messages, participate in cooperative texting sessions, and allow students to learn from one another.

Limitations
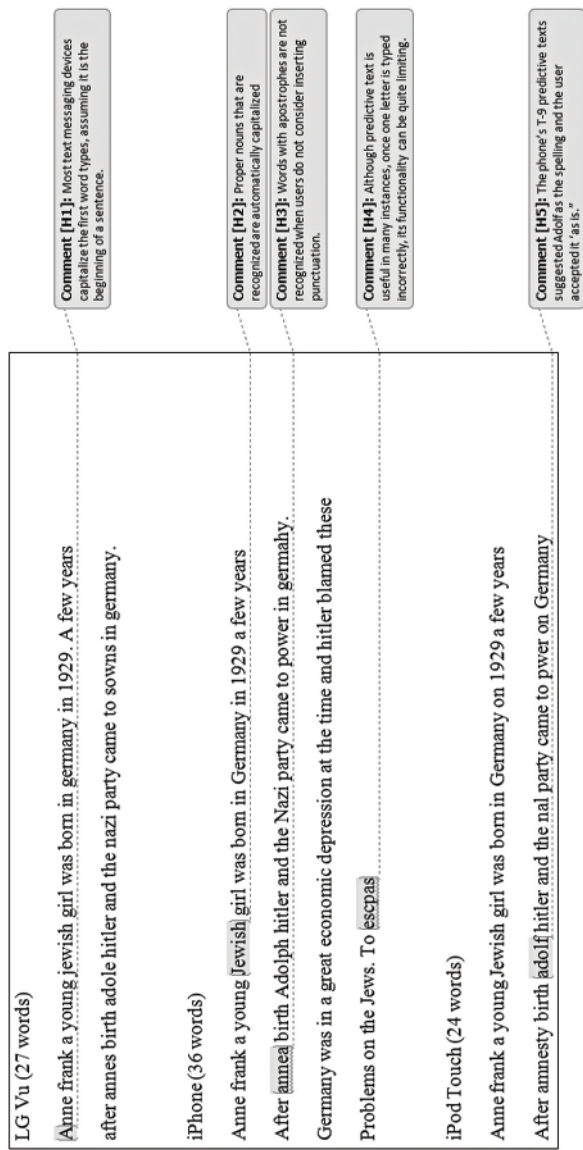
Some cellular devices are designed with SMS texting in mind (e.g., keyboards) while others require more effort to text proficiently. Cellular devices include various keyboard models, such as the QWERTY keypad found on BlackBerry phones, full touchscreen keypads found on the iPhone and other smart phones, a physical full keyboard as part of a phone, and many others. The size of the phone

can also be a limitation for users with large hands or limited dexterity. Another factor participants complained about was the amount of time they had owned the phone used for the assessment. Some participants were using newly purchased cell phones and were not fully familiar with the functions and keys. Participants also noted that they normally type faster when texting informally and slower when copying from a scripted text. The use of T9, or predictive text techonology, sometimes assisted students in increasing speed, while at other times it complicated their task when it did not recognize a particular word such as a proper noun (See Figure 1).

Further research and investigation into methods of instruction are needed for teachers to guide their students to become proficient texters. In addition, increased access, professional development, and updated curriculua are likely needed to reduce the gap between white female proficiencies in oral reading fluency and electronic texting fluencies and those of other subgroups of the population. If issues of unequal access to texts and literate environments are to be addressed, the "lack of homogeneity in speed of information movement" should be a focal point. Those not introduced to media literacies in early elementary grades will not develop digital literacy skills, just as critical developmental reading skills are undeveloped, non print-rich environments. "The current and future health of America's 21st Century Economy depends directly on how broadly and deeply Americans reach a new level of literacy … [including] proficiency in using technology" (National Alliance of Business, 2000, p. 1). In addition, educators must acknowledge that the standards of the past are not sufficient for today's rapidly changing digital society.

Figure 1
Three students' texting samples with analysis

LG Vu (27 words)

Anne frank a young jewish girl was born in germany in 1929. A few years

after annes birth adole hitler and the nazi party came to sowns in germany.

iPhone (36 words)

Anne frank a young Jewish girl was born in Germany in 1929 a few years

After annea birth Adolph hitler and the Nazi party came to power in germahy.

Germany was in a great economic depression at the time and hitler blamed these

Problems on the Jews. To escpas

iPod Touch (24 words)

Anne frank a young Jewish girl was born in Germany on 1929 a few years

After amnesty birth adolf hitler and the nal party came to pwer on Germany

Comment [H1]: Most text messaging devices capitalize the first word types, assuming it is the beginning of a sentence.

Comment [H2]: Proper nouns that are recognized are automatically capitalized

Comment [H3]: Words with apostrophes are not recognized when users do not consider inserting punctuation.

Comment [H4]: Although predictive text is useful in many instances, once one letter is typed incorrectly, its functionality can be quite limiting.

Comment [H5]: The phone's T-9 predictive texts suggested Adolf as the spelling and the user accepted it "as is."

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The DNA of mixed methods: Navigating the proposal and dissertation

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Abstract

Using a DNA molecule and the double helix structure as a metaphor, this paper examines the mixed methods dissertation and describes how the elements come together. Mixed methods is an emerging trend in research methodology. Because of this, it is difficult to find useful guidelines for writing a dissertation using mixed methods. This paper draws upon current mixed methods principles and describes their use in a mixed methods dissertation. The authors discuss the role of epistemology; the use of the double helix template as a guide to illustrate the integration of the core component, supplemental component, and point of interface; data analysis and representation; and the development of these parts in the chapters of a mixed methods dissertation.

The purpose of this paper is to present the perspectives and encounters of two novice researchers who chose mixed methods as their dissertation methodology. The use of mixed methods is still emerging as an accepted means of conducting and presenting research. As such, it is difficult to find a clear path to follow. The following sections outline our epistemological stance and the path we followed through our findings chapter (Smith, 2010; Stoves, 2011). After attending several workshops on mixed methods and reading numerous articles and books, we felt it would be helpful to record our experiences to add to the literature of mixed methods research, especially as our experiences shed light on the

process of completing a mixed methods dissertation proposal and completed dissertation. Similar to the study of the DNA molecule, we found that the use of qualitative data and quantitative data require looking at two very different parts of the same puzzle that together represent the whole.

The DNA Molecule as a Metaphor for Mixed Methods Research

It was lunchtime on February 28, 1953, when Francis Crick announced to patrons at a local pub that he and his fellow scientist, James Watson, had found the secret of life (Marx, 2005). This was quite an inauspicious announcement for a discovery that would soon change the world forever. Watson and Crick had discovered that the DNA molecule, previously believed to be a triple helix, was indeed a double helix, with base pairings of peptides that were specifically matched, one to another (Watson, 1968). These base pairings of peptides were key, as it is this sequence that determines whether a cell becomes a tree or an elephant.

Now, if this were a biology text, we would go into much greater detail about the chemistry involved in making up the DNA molecule. However, maybe much to your relief, this is a paper about mixed methods. But, just as the chemical makeup of a double helix of DNA can yield certain physical characteristics, so the elements within a mixed method study determine what your final product will look like. The DNA molecule in its simplistic complexity makes for a perfect metaphor for mixed-methods studies.

Each of us as mixed-method researchers begins with a research problem and questions. Much like a DNA scientist, we begin our research by identifying a subject, then through thorough study, making determinations about the exact chemistry that contributes to the subject's genetic makeup. You could imagine the difficulty in beginning with a DNA molecule and attempting to determine where it came from without knowing from where the sample came. The molecule in and of itself has little or no meaning without a reference point. The process of DNA identification is most meaningful when completed as an inductive process.

Similarly, as we begin to address our research, we must begin with the problem statement. This will give researchers the reference point, the genetic marker, to which they can then match their methodology. If

we as researchers make determinations about our methodology before we determine if it is appropriate, we will find it difficult—if not impossible—to make a successful match.

Another way in which we use DNA as a metaphor for mixed methods studies is based on the double helix structure of the DNA molecule. Looking like a ladder that is twisted, the DNA molecule has two distinct sides, with base pairings that must match to come together as a single unit. The mixed method study has two distinct sides, each of which represents one of your methods. Making up the rungs of the ladder, each method has base assumptions that must be addressed in the development of your study. While each of the methods can be looked at separately, it is when they are brought together that the study is finally a complete "organism."

Mixed Methods Research

Commonly, researchers looking for ways to build further depth and significance into their studies will seek to add an additional element to their work. Indeed, the addition of a focus group to a quantitative study or the survey to the qualitative study can most certainly enhance the study of the researcher. However, this type of simple addition should not be confused as a mixed methods research process simply because you use a tool not normally associated with your primary methodology.

The DNA molecule is a fascinating chemical structure. Looking at its simple construction, it would be hard to believe that a chain of protein bonds, linked together in a very specific pattern, could be so powerful. However, when looking closely at how the proteins are arranged, it becomes clear that the construction is not so simple or random. Within each molecule, the arrangement of the peptide bonds that make up the proteins in the molecule can only be arranged in a specific way. Much like putting together two magnets: the opposite poles attract, but the similar poles repel. Using two methods to conduct your research needs to be specific to the research purpose and intentionally arranged to answer the research questions.

Employing mixed methods, the research takes on the entire characteristics of one method, while adding the characteristics of another. Care must be taken to not force the methods together or toss them together

like a salad. It should be evident that the research purpose and questions have driven the choice to use mixed methods.

Mixed methods studies may employ strategies from both qualitative and quantitative methodologies, or two strategies from either, and the data may be both narrative and numeric. Either the qualitative methodology or the quantitative methodology drives the study. Morse and Niehaus (2009) define mixed methods as a design that uses both the qualitative and quantitative method in a single study "when one or more of the methods is not complete in itself" (p. 9). In other words, the study has a main or core component that is either qualitative or quantitative and can stand on its own. This core component is enhanced by a supplementary component, which may be either qualitative or quantitative and cannot stand on its own because the data of this component are incomplete. The supplementary component is used to gain a deeper understanding or greater description of the phenomenon being investigated and makes the work more comprehensive than if a single method were used (Morse, Wolfe, & Niehaus, 2006). Using two methods with one study creates more work for the researcher, but the results of having a core component and supplementary component provide the researcher with a greater understanding than that of only one method.

A true mixed methods study, for the purpose of this paper, is based on the definitions developed by Morse and Niehaus (2009). In this definition, the main theoretical drive represents the core methodology, a study that can stand by its self without the secondary method. It is a complete study. Even though it is complete, the core component is richer and more descriptive as a result of addition of the supplemental component.

The secondary method, however, is not a complete study. According to Morse and Niehaus (2009), if the supplemental component were complete, this would be a multiple methods study rather than mixed methods. In a mixed methods study, even though the secondary method is true to the theoretical drive in the analysis, it lacks the depth to truly stand on its own. The true power of the secondary method lies at the point of intersection, where it is incorporated with the analysis of the primary method.

Role of Epistemology and Subjectivity in Mixed Methods Research

In mixed methodology research, the researcher's epistemology and subjectivity play an important role. The researcher is tasked with fitting together two vastly different stances, that of the positivist and the constructivist, and juxtaposing or combining them in such a way that they define or explain the results. In reviewing the role of epistemology in mixed methods research, Leech and Onwuegbuzie (2010) posit that mixed methods research includes "stances and assumptions pertaining to issues such as subjectivity versus objectivity versus intersubjectivity (i.e., ontology) …, and the relationship between the knower and the known (i.e., epistemology)" (p. 75). They add that these "philosophical assumptions and stances play a very important role in all subsequent decisions made by mixed researchers when designing, conducting, and writing up a mixed research study" (p. 76). The concept of how our philosophical assumptions affected our choice of not only mixed methods but also the type of mix was apparent, and we felt the need to write our individual stories.

One researcher's choices. Mixed methods research was never a technique I imagined I would utilize in my research. At first, I felt confident in pursuing a quantitative study. Mathematics came relatively easy to me and I liked the orderliness of it all. There was some suggestion that I use a focus group or similar to enhance the study, but it was not something that would have given rise to a true mixed methods study. I just had the final hurdle of taking a qualitative class and then I could get on my way.

As I began to learn about qualitative methods, I realized that the focus of my study would actually be better served by pursuing qualitative methodology, specifically grounded theory. As my study was focused on a construct not widely studied in my participants, I needed the flexibility to discover and pursue issues that may occur outside my understanding of the topic at the outset of the study. While my new found direction was very exciting, it was still a single methodology that wouldn't quite encompass all I had hoped for.

At first, I was worried about pursuing this new direction. Was it appropriate to shift my methodology so late in the game? Should I have

this level of questioning about the trajectory of my study this late in the process? I would come to find out later that this level of questioning was not only more than appropriate; it is a necessary part of the research design process. It is vital for the research question to guide the research design. Bottom line: If it doesn't fit, don't force it.

It took some time for me to wrap my positivist, mathematical brain around a methodology, which was devoid of a priori assumption and wholly dependent on what the participants brought to the table. But as I progressed in developing my study, it was clear that pursuing a grounded theory methodology would best suit my topic. Feeling now that I had found "the one," I focused all of my efforts on creating a grounded theory study. That was until I attended a workshop on mixed methods presented by Janice Morse. During the course of the workshop, Dr. Morse introduced a new mixed method to me: a QUAL ► qual mixed method. This designation, which will be discussed in detail later, alludes to a study that employs two qualitative methods during the course of the research.

When Dr. Morse introduced this possibility, it was if a lightning bolt struck me. Not only could I research the process that would be revealed by grounded theory; I could also use phenomenology to determine the essence of the experience (Stoves, 2011). In addition, the inclusion of phenomenology would allow me to develop a future instrument to measure the newly formed theory.Itwas clear, once it was revealed, that my study would be better as a mixed methods. While this study could be completed as a grounded theory or a phenomenological study, my research question determined that the answers would be best served if I used both methodologies.

Second researcher's choices. The methodological choices of a researcher are dependent in a great part on the subjectivities of the researcher. Every researcher enters into a study with certain subjectivities of her own. These include the choice of topic, setting, time, and participants, and the choice of specific research questions themselves. All of these are shaped in some degree by the past and present experience of the researcher as well as ongoing experience, because experience and the researcher's response to it are always in a state of flux.

I have been taught that the research question drives the study and that the research question determines whether a study is qualitative or quantitative. However, I've come to realize the researcher's own subjectivities determine or shape the research question. Therefore, those subjectivities come into play long before the research begins.

I didn't choose mixed methods; they chose me. When it came down to deciding on my dissertation topic, I appeared to those around me to have a struggle with my topic. However, the struggle was not with the topic, it was the methodology. Qualitative methods and quantitative methods were held so dearly apart, and mixing them—I mean truly mixing them—was deemed so sacrilegious that I was torn between two vastly different, warring countries. Completing a purely quantitative or qualitative study would have denied my own methodological drive. Similar to the unique combination of measured ingredients and superb taste in an exquisite recipe, I needed the mixture of methods to accomplish a fully baked study, a study that addressed not only my research purpose and questions but also my own subjectivities (Smith, 2010).

As Researchers Evolve, Methods Evolve

Mixed methods study has evolved over the past decade from a research approach that was simply an add-on of one method to another. At one time, these types of studies were predominately quantitative, preceded by either a focus group study used to guide the quantitative portion or a quantitative study that included open-ended questions that were often quantified. Qualitative researchers have vigorously avoided the inclusion of quantitative data to stay true to their methodological principles. Recently, however, respected quantitative and qualitative researchers such as Collins (2006), Greene (2008), Leech and Onwuegbuzie (2009, 2010), Morse and Niehaus (2006, 2009) have developed sound methodological approaches to mixed methods studies.

Well-executed mixed methods studies are still not as plentiful as those that are purely quantitative or qualitative driven and they are often disguised as one methodological principle or the other in order to become published. This paucity is also true for well-executed mixed methods dissertations. Additionally, finding a clear road map or guide-

lines for writing the chapters, parts, sections, and subsections of a dissertation, is difficult and finding those for a mixed methods dissertation is downright impossible.

With this in mind, we provide some experience from our own QUAL+quan and QUAL+qual adventures, and we use the metaphor of the DNA double helix because like the gene pool, research is reflected in its individual structure and dominate characteristics. Additionally, when well executed, a mixed method intertwines two respected methodologies, or two unique parts of one methodology, much like the double helix.

Parts of a Whole

As with any dissertation study, Chapter 1 presents the research topic, statement of the problem, and the research purpose and questions. In an inductively-driven study, two to three research questions are appropriate. These need to reflect the theoretical drive of the study. In other words, two of the questions will reflect the main or core component and one question will reflect the supplemental component.

Morse and Niehaus (2009) use core and supplemental components to represent the two parts of a mixed methods study, and they are credited with creating a nomenclature to represent the paths which these parts follow through the data analysis process. The core component reflects the theoretical drive of the study. According to Morse and Niehaus (2009), this is "the primary (main) study in which the primary or core method is used to address the research question. This phase of the research is complete or scientifically rigorous and can therefore stand alone" (p. 157). The supplemental component reflects the complementary drive, which may be the opposite or the same as the core drive. "The supplementary component is incomplete in itself or lacks some aspect of scientific rigor, cannot stand alone, and is regarded as complementary to the core component" (p. 15). Morse and Niehaus added a simple nomenclature to represent the path, which the core and supplemental components follow. The path may be sequential, represented by an arrow ▶, or simultaneous, represented by a plus sign +. These figures connect the parts of the method, the core component, and supplemental component:

One or more supplementary methodological strategies are used to obtain an enhanced description, understanding, or explanation of the phenomenon under investigation. This component of the project can either be conducted at the same time as the core component (simultaneous) or it could follow the core component (sequential). (Morse, Wolfe,& Niehaus, 2006, p. 2).

In other words, a mixed methods study with a qualitative core component, which is followed by a qualitative or quantitative supplemental component, would be represented as QUAL ► qual or QUAL ► quan. A simultaneous study would be represented as QUAL + qual or QUAL + quan.

The core component and supplemental component are followed by the point of interface. Morse and Niehaus (2009) define the point of interface as the position, in which the two methods join, either in the data analysis or in the narrative. In order to illustrate the use of the core component, supplemental component, and point of interface in a mixed methods dissertation, we arrived at the analogy of the double helix of the DNA molecule (Figure 1).

Dissecting the Double Helix of a Mixed Methods Study

The double helix template can be followed as a backbone for the researcher's proposal and final dissertation study.It may be used to analyze the works of other researchers for use in the study's literature review.Additionally, the template provides clarity for the methods discussion in chapter three. The way this maps out depends on your problem statement and questions. Chapter three thoroughly outlines the type of mixed methods study employed, the rational for the type of study, the theoretical drive, and a review of the literature surrounding mixed methods. It is also helpful to provide the reader with charts or graphs of your own that indicate the path that the components of the study will take.

The Data Analysis and 'Re'presentation

The dissertation's fourth chapter is traditionally where the data analysis and presentation of findings occurs, whether the study is quali-

Figure 1

The double helix of a mixed methods study illustrates the parts required for addressing the research questions and completing the study.
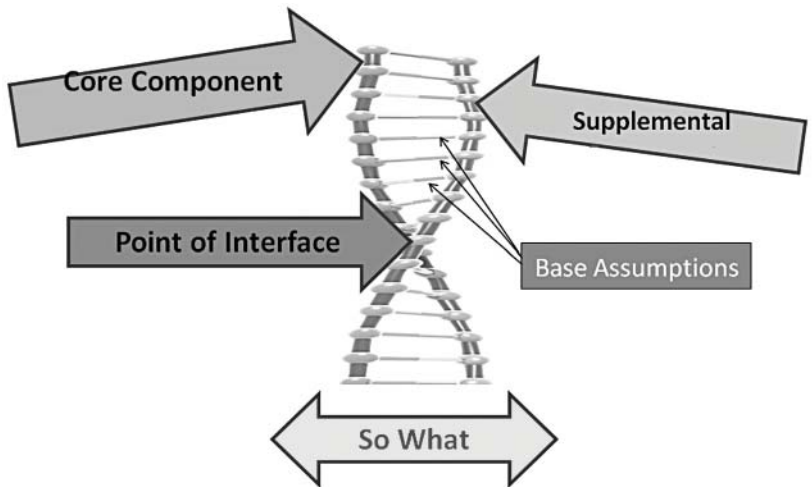
tative or quantitative. This is true for the mixed methods researcher, and by necessity, the chapter will be much longer because of the presentation of two sets of findings and the additional point of interface where the core component and supplemental component are fit together. Chapter four of the mixed methods study begins with the core component section, which relates the findings of the main component, organizes the findings according to themes and subthemes, and then summarizes these to synthesize results and lead into the supplemental component.

The supplemental component relates the findings of the analysis of the supplemental data. This section is organized according to, reflective of, and goes into equal depth as the core component. Additionally, it must adhere to the principles of the supplemental component's methodology. This section is concluded with a summary paragraph, which synthesizes the findings as related to the core component and points the reader to the point of interface.

The third section in chapter four is the point of interface. At the point of interface, the findings of the core component and the supplemental component are fit together. Here a third set of findings, point of interface, emerges, which reflects the format of core component and ties in the supplemental component. Additionally, this section shows how the core component and supplemental component fit together or diverge. The narration of this section shows how the two components line up or don't—be honest.

Analysis of the findings from the point of interface should be left for chapter five. This provides details of the big "so what" of the study – why the study was important and what it contributes to what we now know. This section is where the researcher connects the themes of the data to the existing theories. Additionally, this section answers the research purpose and questions, provides implications and directions for future use, and indicates what is now known when the results of the research and the existing literature are considered together.

Conclusion

The parts are the puzzle for a novice researcher. Most universities offer in-depth classes in either quantitative or qualitative methods, but few as yet offer a strictly mixed methods approach. This is due to the arguments between methodologists as to whose method is better; the word "valid" is often bandied about; and there are lengthy discussions as to whether the dichotomy of the two methods can be or should be "mixed." Further convoluting the puzzle, qualitative and quantitative purists use different words to discuss many of the same ideas. These problems leave the novice researcher with a much greater task than simply following one method that has been clearly laid out by past researchers.

As novice researchers, we were naïve about the complexities of mixed methods research; in other words, ignorance was both bliss and curse. Finding descriptions by reputable methodologists—which would provide clear mixed method research guidelines—was key to our success.Likewise, the use of the double helix as a graphical metaphor for the path of a mixed methods study helped us conceptualize the parts and break them down into manageable pieces.

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Texas Senate Bill 174: Improving transparency in higher education

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Abstract

Policy development is a value-laden process that moves a policy from the "idea" stage to the implementation stage and ultimately to a point where the policy can be assessed (Fowler, 2009). In 2009, the Texas Legislature passed Senate Bill 174. This bill requires all public higher education institutions (HEIs) in Texas to publically post financial information (Young, 2009a). The bill was lauded as a solution to rising college costs because it required HEIs to provide certain financial information to legislators and to the public through online institutional resumes (Young, 2009). The purpose of this paper is to provide an in-depth analysis of the development of SB 174.

Introduction

The Great Recession brought (and still brings) both an influx of students to higher education and an influx of legislation dealing with transparency and accountability of higher education. At the same time, colleges and universities are being pushed to assume business models for their operations. The belief among legislators is that transparency drives competition because it makes information available to consumers for decision making purposes (Young, 2009b). In Texas, Section 3 of Senate Bill 174 (SB 174) was enacted to require public higher education institutions (HEIs) to post financial information to provide transparency in higher education (Young, 2009a). The purpose of this paper is to provide an in-depth analysis of the development of SB 174.

Policy Environment

In the months leading up to the 81st Legislative Session in Texas, the United States was faced with some very unsettling realities. There was an economic crisis that included failing banks and bailouts, a complete meltdown of the housing market, and steadily rising unemployment (External Relations, 2009). In California and several other states, higher education appropriations had been cut drastically to help the failing state economies (External Relations, 2009). In Texas, the economy was more stable, but the overall economic environment did not bode well for lawmakers as they prepared to draft the two-year state budget (External Relations, 2009).

College tuition costs in Texas were on a steady rise, increasing by more than 86% in the six years since tuition deregulation (Stutz, 2009). At the same time, state funding to higher education in Texas had increased by 64.1 percent from 1991 to 2007 and from 2007 to 2009 state funding to higher education was increased again by 15 percent (Young, 2009a). As a result, there was significant discussion among policymakers in 2009 to initiate affordability and accountability measures for HEIs, thus making higher education more transparent to taxpayers (Young, 2009b). Lawmakers and taxpayers were focused on the rapidly rising costs of college and reform measures that might drive the costs down or at least prevent them from rising so rapidly (Young, 2009a).

Public interest in rising college tuition cost was significant enough to garner the attention of an organization called the Texas Public Policy Foundation (TPPF). The TPPF and other policy analysts called for lawmakers to enact legislation that would force higher education into the free-market by creating competition. They posited that competition would drive costs down which would compel colleges and universities to offer a high quality education at a reasonable cost (Young, 2009a).

Issue Definition

The issue was that college tuition costs were rising exponentially, while state funding to higher education was also rising significantly, so the lawmakers and the public wanted transparency—they wanted to know what colleges and universities were doing with taxpayers' money.

A more overarching theme of the 81st Legislative Session was that tuition de-regulation in 2003 had opened the door for colleges and universities to raise tuition and fees freely. Lawmakers were focused on reining in college costs by freezing or putting a cap on the rate by which colleges could increase tuition and fees (Stiles & Kever, 2009). Since costs were at an all time high, the TPPF also highlighted the need for legislation that would require public colleges and universities to post online resumes including financial information so students could do a cost-benefit analysis as they decided which college or university to attend (Young, 2009b). According to Young (2009a), no rigid spending structure existed for HEIs; therefore, transparency initiatives were necessary as a means for identifying waste, eliminating fraud, keeping costs down, and keeping students in college.

Also at this time, for-profit HEIs were seeing huge increases in enrollment, which translated to fewer potential students for public colleges and universities (Schools of hard knocks, 2010). In fact, the Schools of Hard Knocks article (2010) reported that there were 3.2 million students enrolled in for-profit higher education in the 2008–2009 school year. For-profit higher education was able to offer accessibility through online degree programs, accelerated course length, and independent study tracks (Schools of Hard Knocks, 2010).

There was also a great amount of focus on the idea that students, parents, and taxpayers are university customers (Young, 2009b). As customers they should have insight into the financial information as a means for making a choice about the quality of education they might receive from each higher education institution (Young, 2009b). Interestingly, the TPPF also called for more comprehensive legislation that would require institutions to include faculty productivity and costs per student on their institutional resumes (Young, 2009b).

Policy Agenda

The policy agenda, according to Fowler (2004), is all of the concerns that are up for serious discussion among a wide variety of stakeholders. In other words, it is all of the possible policies being discussed among many different entities involved with the support, development,

and implementation of laws. Some of the entities included in the policy agenda of SB 174 are the Texas Public Policy Foundation, public HEIs in Texas, college presidents, faculty and staff, the Texas Higher Education Coordinating Board, the Texas Education Agency, parents, students, taxpayers, and Texas legislators.

The TPPF characterizes SB 174 as a critical first step in improving transparency in public higher education in Texas (Young, 2009a). SB 174, according to the TPPF (Young, 2009a), is a much needed educational reform measure that will allow taxpayers and university customers to track university spending. They contend that the required institutional resumes posted by universities will allow university customers to perform cost-benefit analyses while making college decisions (Young, 2009a). For the TPPF, the issue is that public colleges and universities are not subject to business model transparency requirements, even though they have received increased state funding while also being allowed to raise tuition rates (Young, 2009b). The TPPF furthers that as universities become more transparent, there will also be more competition for students, which will stabilize college costs to taxpayers and university customers (Young, 2009b).

The Texas Higher Education Coordinating Board (THECB) characterizes the issues surrounding SB 174 only in terms of the requirements for online institutional resumes (External Relations, 2009). There is very little information available about the opinion of THECB on SB 174 and how it will affect higher education other than to say that it will improve transparency and accountability (External Relations, 2009). It appears that the lack of information available speaks to THECB's support of SB 174, as there was no information to be found that would lead to the conclusion that THECB was not in support of transparency and accountability for public HEIs in Texas.

Although the TPPF seems to have had a great deal of influence in passing SB 174, there is not a lot of information available regarding other entities' characterizations of the portion of SB 174 that affects higher education transparency. Instead, there is an abundant amount of information regarding the portion of SB 174 that deals with accountability of educator preparation programs. It is of great interest that there

is not more information regarding the transparency portion of the bill. Overall most of the entities listed characterize SB 174 as a bill that will help university customers in decision making by forcing HEIs to make financial information public and pushing HEIs into free market competition.

Policy Formulation

During policy formulation, administrative agencies formulate rules that clarify the often vague language used by lawmakers (Fowler, 2004). Administrative rules, according to Fowler (2004), can serve three distinct purposes: (a) they fill in gaps in laws left by lawmakers; (b) they define key terms; and (c) they define internal procedures.

The enrolled version of SB 174 includes nearly 10 pages of rules and definitions. The rules are divided into several subsections, which include the duties of THECB regarding online institutional resumes and the duties of HEIs regarding online institutional resumes (SB 174, 2009). The rules also define the required contents for each online resume type; there are two types of resumes for two different audiences, prospective students and legislators (SB 174, 2009). Additionally there are distinctions between resumes for four-year institutions, two-year institutions, and medical and dental institutions (SB 174, 2009). There are no rules or definitions regarding funding for the implementation of SB 174 (SB 174, 2009).

A bill analysis by the Senate Research Center (2009) clarified three rules regarding the online institutional resumes. The online institutional resumes include information on the classification of the institution according to THECB's accountability system; the classifications are four-year general academic, two-year lower level, and medical and dental units (Senate Research Center, 2009). Each resume must also include a listing of both in-state and out-of-state peer institutions, and it must present information for only the most recent fiscal year (Senate Research Center, 2009). The Senate Research Center also explained that each institutional resume for legislators must include information under the following headings: enrollment, costs, student success, and funding. Each resume for prospective students must include information under head-

ings such as "enrollment, degrees awarded, costs, financial aid, admissions, baccalaureate success, and certification examination pass rates" (Senate Research Center, 2009, p. 3). The information provided by the Senate Research Center (2009) also clarifies that THECB has authority to determine if any requirement for online institutional resumes duplicate requirements under its own Voluntary System of Accountability.

Fowler (2004) indicated that administrative rulemaking can facilitate a smooth implementation of policy, and it can also help lighten the load of the legislature. There was clearly a move by the Texas Senate to delegate some rulemaking to THECB; however, as mentioned earlier, they did include almost ten pages of rules themselves. One of the rules included by the Texas Senate placed the responsibility for implementation and maintenance of SB 174 squarely on the shoulders of THECB (External Relations, 2009). According to THECB's own summary of the 81st Legislature, THECB must consult with each higher education institution to obtain the required information and post a one page resume on both THECB's website and the website of each higher education institution no later than February 1, 2010 (External Relations, 2009). THECB must also adopt rules for implementation and maintenance of the online institutional resumes (External Relations, 2009). A comprehensive search of THECB's online database of current rules yielded no existing rules for the management of online institutional resumes. Interestingly, the entire Negotiated Rulemaking section of THECB's website is completely blank.

Policy Adoption

Fowler (2004) explained that there are three ways to influence policy adoption: government relations, professional organizations, and lobbying. In order to move a policy through policy adoption, leaders must build relationships with policymakers, members of professional organizations, and lobbyists (Fowler, 2004).

Government Relations

In the case of SB 174, the TPPF played an integral role in the adoption of the bill. The TPPF is a "non-profit, not partisan, research

institute" that works to "defend liberty, personal responsibility, and free enterprise in Texas" (TPPF, n.d.). According to the website, the TPPF is charged with bringing ideas to policymakers (TPPF, n.d.). It appears that one of the ideas was SB 174, which was promoted by the TPPF to policymakers as a way to provide transparency of HEIs. The TPPF had many existing relationships with policy makers, and therefore, was allowed to testify at least three times in support of SB 174 (TPPF, n.d.).

Professional Organizations

Prior to SB 174 professional organizations worked with public colleges and universities to make information available to the public and policymakers through the Voluntary System of Accountability. The Voluntary System of Accountability (VSA) was the precursor to the online institutional resumes required by SB 174. The VSA initiative was led by a group of university leaders, the Association of Public and Land-Grant Universities (APLU) and the American Association of State Colleges and Universities (AASCU) (Association of Public and Land-Grant Universities, 2007). The VSA still exists and now public colleges and universities in Texas participate in the VSA as and report their information through THECB to be in compliance with SB 174 (SB 174, 2009). Although both the APLU and the AASCU supported the VSA, there is no evidence that either of these entities supported SB 174 in Texas.

Lobbying

In addition to testimony by the TPPF, Dr. Raymund Paredes, Commissioner of Higher Education, believes that SB 174 will enhance accountability of HEIs (Paredes, 2010). It does not appear that public college and university officials were involved in lobbying or speaking for or against SB 174. As stated above the TPPF was integral in making contacts about SB 174, but there is no further information available regarding lobbying for or against SB 174.

Policy Implementation

The next phase in policy development is implementation. Fowler (2004) defined implementation as the stage in which policy is put into

action. The implementation phase relies on people to carry through with putting the policy into practice; these people include formal implementers and intermediaries (Fowler, 2004). These groups of people are affected by the policy because they have the responsibility of making the words into actions on their campuses, in their buildings, and for those who must enforce policy. For SB 174 the formal implementers are staff at THECB. According to the rules stated in the enrolled version of SB 174 (2009), THECB is responsible for developing and maintaining a depository for online institutional resumes. THECB is also responsible for requesting resume information from HEIs, establishing the list of peer institutions, ensuring the resume information is accurate and modifying the peer institution information for uniformity (SB 174, 2009). This means that THECB is greatly affected by SB 174 in that they are responsible for gathering and maintaining all online institutional resumes. In other words, THECB is the formal implementer.

Others affected by SB 174 include all public HEIs, including four-year institutions, two-year institutions, and medical and dental units, because the institutions must submit to THECB all information for the online institutional resumes (SB 174, 2009). HEIs are also responsible for prominently displaying their online resumes on their own websites (SB 174, 2009).

Fowler (2004) also related that during the implementation phase, there is a mini policy adoption that must occur within the group of implementers. In order for an implementation to be successful, staff at a local level must also adopt the policy (Fowler, 2004). If the policy is not adopted at the local level it may, in fact, result in failure (Fowler, 2004). Under the auspices of Fowler's explanation, both THECB and HEIs should have adopted SB 174 at the local level. This was not the case; instead the body of SB 174 included instructions for implementation written by the Texas Senate. The responsibilities for the implementers were spelled out in Sec. 51A.002 and Sec. 51A.003 of SB 174 (2009). SB 174 was not optional or voluntary; therefore the implementers were not allowed to adopt the policy at the local level. Fowler (2004) explained that there are good and bad reasons for adopting a policy locally. One of the good reasons is that it will solve a legitimate issue or prob-

lem (Fowler, 2004). As stated earlier, the public wanted transparency or in other words they wanted to know what colleges and universities were doing with taxpayers' money. Legislators formed SB 174 to solve this issue without giving local level implementers the ability to complete a local adoption of the bill.

Fowler (2004) described appropriateness as another issue that must be considered during the policy implementation phase. Appropriateness involves making sure that the requirements of a policy match the available local or state resources (Fowler, 2004). For SB 174, the resources needed to satisfy requirements include at least staff at THECB to manage the establishment and maintenance of the online institutional resume depository, staff at the HEIs who will provide the information to THECB, and space for the depository on both THECB's website and on the higher education institution's websites. The text of SB 174 (2009) did not include provision for resources, but placed the responsibility for implementation on THECB.

Support from key stakeholders is essential to successful policy implementation (Fowler, 2004). The key stakeholders involved in SB 174 were students, parents, THECB, HEIs, and taxpayers. Not only was it essential for policymakers to gain support from THECB and HEIs, but it was also essential to garner support from students, parents, and taxpayers. The students, parents, and taxpayers are the stakeholders who will use the information, so if there was not support from this base, the information would not be utilized and the implementation would fail. It is not clear that policymakers worked to gain support from the key stakeholders, but Fowler (2004) suggested that if leaders only guessed at the level of support from key stakeholders, the policy implementation phase might fail.

Policy Assessment

The goal of SB 174 was to improve transparency and accountability in public higher education in Texas. Online institutional resumes were to be completed and available on THECB's website and on each HEI's website by February 1, 2010. SB 174 requires evaluation to determine

whether it does in fact improve transparency and accountability in public higher education in Texas.

Fowler (2004) listed the steps of the policy evaluation process as determining the goals, collecting the data, and analyzing the data. Evaluations must be completed with the help of several groups of players, including "the policy makers, the policy implementers, the clients, and the evaluators" (Fowler, 2004, p. 314). In terms completion of the task of implementing online institutional resumes, the bill was successful. However, the assessment of how well SB 174 solves the problem of transparency in public higher education is not apparent. The TPPF made it clear even just after the bill was enacted that SB 174 was only a first step toward transparency and that it should include stronger language and additional requirements (Young, 2009a). A comprehensive search of THECB's website yielded no plan for evaluation of SB 174, nor does the text of the bill include provision for evaluation.

Conclusion

SB 174 was enacted to require colleges and universities to post financial information in order to provide transparency in higher education (Young, 2009b). The TPPF believed that transparency was a means for driving competition in the public higher education marketplace (Young, 2009a). SB 174 was meant to ensure effective and efficient spending in higher education and ensure the quality of services provided by HEIs (Young, 2009b). This analysis of SB 174 uncovered that the bill was pushed by the agenda of the TPPF and then formulated and adopted by the Texas Senate with very little input from stakeholders other than the TPPF. The rules included in the bill required that THECB and HEIs would implement it by February 1, 2010. As a result it was implemented, but there is no evidence of an existing assessment or evaluation plan for SB 174.

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Low performance on teacher certification exams: A hidden consequence of English language learners' underdeveloped first language?

Martin J. Ward
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Abstract

The value of dual language education was central to learning as Texas emerged as a national leader in 1983 with bilingual educational opportunities for public school students. This study identified Spanish first-language preservice teachers' struggles with state-mandated standardized teacher certification examinations. It suggested that dual language education would help prepare future English language learners for standardized testing. The Gates-MacGinitie Reading Test (GMRT) – Level 10/12 was used to determine a uniform measure of the reading ability of 259 pre-service teachers from a South Texas university. Results showed a disparity between bilingual, Spanish-first-language pre-service teachers and their English-first-language counterparts. This indicated pre-service teachers' early educational experiences may have lacked the socio-cultural supportive school environment needed for ELLs to flourish linguistically, academically, and cognitively in their first language.

During the 1970s the State of Texas adopted legislation, as required by Lau v. Nichols (1974), intended to provide bilingual education for English language learners (ELLs) attending public school kindergarten through 3rd grade. With the extension of this provision to include pre-

kindergarten through 5th grade in 1983, Texas became a national leader in bilingual educational opportunities for public school students.

The ideals of the Texas bilingual educational law support research findings that stress the need for socioculturally supportive school environments for ELLs so that their natural language, academic, and cognitive development may flourish (Center for Research on Education, Diversity & Excellence, 2002). Parents of these ELLs want their children to learn English and, at the same time, retain their native languages and cultures. However, the parents who struggle more with English are less likely to participate in home learning experiences with their children that support English acquisition, such as shared book reading or storytelling (Rodriguez-Brown, 2010).

As sociocultural theory is applied in a classroom, ELLs feel that their experiences are valued. Within a personalized, positive, and consistent classroom environment, ELLs can develop their own "academic identity" in a second language (Walqui, 2002). Such a learning environment allows the ELL to slowly begin the process of stating his/her voice in classroom interactions, thus promoting oral language development and English language acquisition.

When compared with other educational approaches provided for ELLs, well-designed and carefully implemented dual language education programs resulted in significant student achievement gains in English literacy, as well as other academic core courses (Association for Supervision and Curriculum Development, 2004). Early and sustained participation in an enrichment dual language program may provide the support needed for ELLs' achievement on standardized tests to be comparable to that of their English first-language peers.

A national study of school effectiveness upon ELLs' long-term academic achievement demonstrated that dual language programs promoted the highest levels of overall academic achievement and produced the fewest dropouts (Thomas & Collier, 2002). Wayne Thomas and Virginia Collier reviewed over two million students' records from school years 1982–2003. Using national standardized reading test results of 11th graders who entered U.S. school districts as kindergarteners or 1st graders with no proficiency in English, they found:

- English language learners (ELL) whose parents refused bilingual/ESL services showed large decreases in reading and math achievement by the 5th grade. This group also had the largest dropout rate.
- ELL that completed two to three years of ESL pullout programs graduated at the 11th percentile.
- Transitional bilingual education taught in a segregated classroom resulted in a 24th percentile score by graduation.
- Transitional bilingual education with ESL in the content area produced a 32nd percentile score by graduation.
- Enrichment 90/10 and 50/50 dual language programs were the only programs to fully close the achievement gap between ELL and their English-speaking counterparts. The fewest dropouts also came from these programs.

More recently, the National Literacy Panel on Language Minority Children and Youth referenced the work of Francis, Lesaux, and August (2006) who found:

There is no indication that bilingual instruction impedes academic achievement in either the native language or English, whether for language-minority students, students receiving heritage language instruction, or those enrolled in (French) immersion programs. Where differences were observed, on average they favored the students in a bilingual program. The meta-analytic results clearly suggest a positive effect for bilingual instruction that is moderate in size. (p. 397)

Providing an appropriate, equitable educational experience for the State of Texas' diverse student population, including ELLs, calls for the preparation of teachers who are motivated and prepared to teach students with varied backgrounds. The presidential commissioned report, *A New Era: Revitalizing Special Education for Children and Their Families* (President's Commission on Excellence in Special Education Report, 2002), recommended that states and school districts devise new strategies to recruit, train, and retain highly qualified teachers. In the

report, it was noted that despite the increasing diversity in schools, the proportion of minority teachers is decreasing. The importance of role models from a student's own culture and racial or ethnic background was emphasized. Furthermore, the George W. Bush's Advisory Commission on Educational Excellence for Hispanic Americans (2003) stressed the importance of culturally and ethnically representative classroom role models for students.

In Texas, and nation-wide, prospective teachers must pass standardized certification examinations for entry into the teaching profession. The standardized teacher testing movement gained momentum with the U.S. Supreme Court decision in 1978 upholding the National Teacher Examinations, U.S. v. State of California, 434 U.S. 1026 (Valencia & Aburto, 1991). Today, pre-service teachers throughout the nation are required to pass state-mandated, timed, paper-and-pencil tests of pedagogical and content knowledge in order to become certified teachers (National Center for Education Statistics, 2003).

Passage of the Texas Examinations of Educator Standards (TExES) Pedagogy and Professional Responsibilities (PPR) exam, a standardized test, is required for teacher certification in the State of Texas (State Board for Educator Certification, 2004). Standardized tests, including teacher certification examinations, have proven to be more difficult for students of color than their European-American counterparts (McIntosh & Norwood, 2004; Tellez, 2003; Wakefield, 2003). The standardized testing approach to assessing future teacher effectiveness tends to overly reward pre-service teachers' analytical and reading abilities (Hirsch, 2003). Most Hispanic Spanish-speaking bilinguals need extra time to process two languages, which can lead to heightened anxiety that may undermine performance on timed tests (Sandoval & Duran, 1998). Is it possible for a talented bilingual Spanish first-language preservice teacher to be disadvantaged at a level of reading comprehension required for standardized test success, yet still possess abilities of even greater consequence for teaching effectiveness?

According to the 2000 U.S. Census, there were 21,320,047 persons five years of age or older in the United States who spoke English "less than very well." Of those persons who spoke English less than very

well, over 60% were Spanish speakers. In the State of Texas, 32% of the population are Hispanics, of which, 27% or 5,195,182 speak Spanish in the home. Almost half of those Spanish-speaking Hispanic Texans describe themselves as speaking English less than very well.

Recently, The Tutorial and Academic Skills Center of DeAnza College identified "Generation 1.5" as students whose home language is not English, yet who have been educated in the United States. These students acquire most of their English through informal or passive interactions with persons and the media. As a result of their oral-based English acquisition, many struggle with correct verb usage, pluralization, and other word forms. Communication in writing is especially challenging when the context of discourse is unavailable. Even the ability to proofread is lessened due to the inability of the Generation 1.5 students to "hear" their mistakes when proofreading (DeAnza College, 2011).

LaCelle-Peterson and Rivera (1994) state, "When it comes to languages, we believe that more is better, both for individuals and for the nation. Bilingualism is not an elusive goal, but rather a relatively common human experience, and an even more common educational goal" (p. 57). They suggest that rather than viewing the native languages of English learners as problems to be overcome, our future teachers should be prepared to build upon each student's unique abilities. Their suggestion is especially valuable when considering the linguistic diversity among Hispanics that includes Spanish monolinguals, Spanish-dominant bilinguals, English-dominant bilinguals, equally balanced bilinguals and English monolinguals (Rodriguez, 1992).

Despite the increasing value of being multi-lingual in today's global marketplace, research indicates that the State of Texas teacher certification process may actually be biased against bilingual pre-service teachers because these tests are standardized (Chen & Henning, 1985; Scheuneman & Oakland, 1998; Ward, 2005). Valdes and Figuerora (1994) contend:

The testing of bilingual individuals has developed from the practice of testing monolinguals without the necessary examination of the assumptions underlying the measurement of monolingual abilities and the ap-

plicability of these assumptions and theories to the measurement of the
same abilities in persons who function in two language systems. (p. 2)

One of the major problems for minority future teacher candidates
with standardized tests is that the tests are poor indicators of teacher
success in the classroom, because affective variables are not tested
(Justice & Hardy, 2001). Over-reliance on standardized tests coupled
with lesser emphasis on affective teaching skills may impede Texas
schools' efforts to meet the needs of an ever-increasing bilingual His-
panic student population. Is the state of Texas effectively cultivating its
own supply of future teachers for its ever-growing ELL population?

Among the most neglected segments of the high school student pop-
ulation is that of Mexican-American and other Latino English language
learners (Ruiz de Velasco, et. al., 2000). Spanish-speaking bilingual pre-
service teachers may possess personal experiences and abilities needed
to meet the needs of the state's bilingual Hispanic students (Valencia &
Aburto, 1991). While the validity of high reliance upon the standard-
ized testing process for teacher certification is questionable, perhaps of
greater importance is the issue concerning how the Texas public school
experience of ELLs prepares them for success with standardized tests
such as the TExES.

This paper addresses the following research question: Does the
reading ability of bilingual, Spanish-first-language pre-service teach-
ers have a significantly greater impact upon their teacher certification
examination scores when compared with their English-first-language
counterparts?

Method

Participants

The research sample for this study consisted of 259 pre-service
teachers enrolled from fall 2003 through spring 2005 in the field-based
teacher education program of a South Texas university. Two hundred
and sixteen participants were female, and 43 male. Their ages ranged
from 20 to 56, with more than two-thirds of participants age 21–26.

The sample reflected the ethnic composition of the South Texas region. One hundred and twenty-six of the participants were European-Americans and 119 were Hispanic, while the remaining 14 pre-service teachers identified themselves as black, Asian-American, American Indian, or other. Nineteen of the 100 Hispanic pre-service teachers named Spanish as their first language.

Instruments

The Gates-MacGinitie Reading Test(GMRT) – Level 10/12 was used to determine a current, uniform measure of the preservice teachers' reading abilities. The test was administered during the orientation meeting on the first day of class each semester from fall 2003 through spring 2005.

The Gates-MacGinitie Reading Tests are designed to provide a general level of reading achievement. The GMRT consists of a vocabulary section and a comprehension section. The GMRT assesses the preservice teachers' word knowledge with 45 questions that begin with easy, commonly-used words and then progresses to less common, more difficult words. The comprehension portion of the test consists of 11 passages of varying lengths and subjects. Pre-service teachers are required to demonstrate understanding of both explicit and implicit information presented in the passages (MacGinitie, MacGinitie, Maria, & Dreyer, 2000).

In order to become eligible to take the official TExES PPR the preservice teachers of this south Texas university are required to take a university administered practice certification examination known as the "Pre-TExES PPR." The Pre-TExES PPR was administered to each of the pre-service teacher cohorts at a midway point during the semesters from fall 2003 to spring 2005 by the university's College of Education faculty. Upon completion of the Pre-TExES PPR the university pre-service teachers register and pre-pay for the official TExES PPR on their own.

Results

The combined results of the vocabulary and comprehension portions
of the Gates-MacGinitie Reading Test - Level 10/12 produced an
extended scale score (ESS) for each participant. The extended scale
scores, referred to as "GATESESS," clustered near the upper end of the
scoring scale varying across a relatively small range of scores. While
high achievement of the pre-service teachers on the Gates-MacGinitie
Reading Test – Level 10/12 was expected, the range of scores indicated
that the GMRT might be useful in assessing the relationship of pre-
service teachers' reading abilities with their performance on the state-
mandated teacher certification exams.

Pre-service teachers' scores on the TExES PPR, as shown in Table
1, were also clustered at the upper end of the scoring scale in a varied
distribution across a small range of scores. As a criterion-referenced
exam requiring a "passing" percentage of approximately 80%, this clus-
tering at the upper end of the scoring scale for the TExES PPR was an
expected achievement goal for the pre-service teachers.

Table 1
**Descriptive statistics of pre-service teachers' scores on the
Gates-MacGinitie Reading Test (GMRT) and the TExES PPR**

Measure	GMRT	TExES PPR
Number	259	259
Mean	609.10	261.75
Median	605	263
Mode	591a	263
Standard Deviation	32.491	16.707
Range	185	91
Minimum	512	202
Maximum	697	293

a. Multiple modes exist. The smallest value is shown.

Statistically speaking, a "substantial" relationship (Williams, 1992, p. 137) was found between the GMRT and the TExES PPR as indicated by the Pearson correlation coefficient (r) of .542. Over 29% ($r^2 = .294$) of the preservice teachers' certification exam scores were explained by their scores on the GMRT. According to Cohen, the pre-service teachers' reading skills had a "large effect" upon their success with the teacher certification examination (as cited in Gravetter & Wallnu, 2004, p. 295). Furthermore, the limited range of the preservice teachers' scores on the GMRT and TExES PPR acts to reduce r and r^2, therefore increasing the meaningfulness of 29% common variance.

The first language characteristic of the 19 Spanish-first-language pre-service teachers in this study was found to have a powerful influence upon their certification examination results. The native English-speaking preservice teachers' average TExES PPR score was 264 compared with the 19 Spanish-first language preservice teachers' average score of 244 (see Table 2). The minimum passing score for the TExES PPR is 240 (out of a possible 300), thus a score of 244 is less than two percentage points above a failing score.

Table 2
Means and standard deviations of preservice teachers' scores on the GMRT and the TExES PPR based upon first language.

Measure	English first-language PSTs		Spanish first-language PSTs	
	GMRT	TExES PPR	GMRT	TExES PPR
Number	236		19	
Mean	612.03	263.50	582.58	244.32
SD	31.708	15.560	24.468	17.043

The difference between the correlations of reading and teacher certification examination scores for the groups of pre-service teachers based upon language differences is particularly meaningful in light of the superior certification exam results achieved by the English first-language pre-service teachers. The pre-service teachers for whom Spanish

was a native language had a much stronger relationship between their GRMT scores and their TExES PPR scores than did the English-first-language preservice teachers. The correlation of the Spanish-first-language preservice teachers' reading and certification scores was $r = .720$ as compared to $r = .486$ for the English-first-language preservice teachers. As shown in Table 3, the reading ability of Spanish-first-language pre-service teachers' produced an effect size of $r^2 = .518$ upon their teacher certification examination results. Meanwhile, the English first-language preservice teachers' GRMT scores produced an effect size of $r^2 = .236$ upon their TExES PPR scores. Thus, 52% of the variance (r^2) of the TExES PPR scores of students whose first language was Spanish was explained by their GMRT scores, while only 24% of the English-first-language pre-service teachers' TExES PPR scores were explained by their GMRT scores.

Table 3
Pearson intercorrelations of preservice teachers' scores on the GMRT and the TExES PPR based upon first language

First language	r	r^2
English	.486	.236
Spanish	.720	.518

Note: All coefficients are significant at p < .01.

Discussion

The reading ability of bilingual, Spanish-first-language preservice teachers had over twice the influence (52% compared to 24%) upon their teacher certification examination scores as compared to the influence that reading ability had upon the certification exam scores for English first-language preservice teachers. Meanwhile, the average TExES PPR score for the bilingual Spanish-first language preservice teachers was barely above the minimum score required for teacher certification. English-first-language preservice teachers, on the other hand, averaged over one standard deviation higher on their TExES PPR scores than their

bilingual counterparts. How is this disparity between bilingual, Spanish-first-language pre-service teachers and their English first-language counterparts explained? Could it be traced back to the pre-service teachers' early educational experiences that lacked the socioculturally supportive school environment needed for ELLs to flourish linguistically, academically, and cognitively in their first language?

Classroom situations calling for bilingual skills on the part of the teacher occur on a regular basis in South Texas. At the present it appears that not only is a pre-service teacher's bilingual ability taken for granted in the State of Texas teacher certification process, it is actually a hindrance for some in becoming a fully certified teaching professional. While on the one hand, teacher educators must challenge the validity and usage of the timed, paper-pencil examinations as the ultimate determinant of a "highly qualified" teacher, efforts need to be made to promote the highest possible quality dual language education in the public schools. ELLs' abilities to succeed on standardized tests, such as the TExES, are significantly influenced by their linguistic, academic, and cognitive development that occurred in their early experiences in the public schools. High quality dual language education is needed for the ELLs of Texas in order for them to maximize their linguistic and analytical abilities and thereby improve their scores on standardized tests. Facilitating, rather than impeding, the certification of bilingual Spanish-speaking preservice teachers must be addressed by the educational leaders of Texas.

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