Journal of Curriculum and Instruction (JoCI)
May 2012, Vol. 6, No. 1, Pp. 25-42
http://www.joci.ecu.edu

ISSN: 1937-3929
doi:10.3776/joci.2012.v6n1p25-42

Biography-Driven Strategies as the Great Equalizer: Universal Conditions that Promote K-12 Culturally Responsive Teaching

Della Pérez
Melissa Holmes
Stuart Miller
Cristina A. Fanning
Kansas State University

Abstract

The growing number of culturally and linguistically diverse (CLD) students entering our public school system demands a new pedagogical framework for teaching and learning. With its emphasis on all four dimensions of the CLD student biography (sociocultural, linguistic, cognitive, academic), *biography-driven* culturally responsive teaching (Herrera, 2010) addresses the limited attention currently devoted to second language learning issues in the literature and research related to culturally responsive pedagogy. This study investigates the use of biography-driven instructional (BDI) strategies by 58 general education teachers at the elementary and secondary levels with CLD students in their classrooms using the Biography-Driven Performance Rubric, which measures enactment of teaching standards and educational best practices. Findings indicate that the use of BDI strategies can facilitate the practical actualization of culturally responsive teaching. Findings also suggest that implementation of BDI strategies can help teachers overcome challenges that are unique to secondary settings as they accommodate the assets and needs of CLD learners.

Since the beginning of the 21st century, our nation has seen new demographic shifts that have had a significant impact on how we conduct our daily teaching practices in the schools. The National Clearinghouse for English Language Acquisition and Language Instruction Educational Programs (2010) reported that between 1998 and 2008 the nation saw an increase of 53% in the number of students who speak English as a second language. In some states, such as South Carolina, this increase in the number of English language learning (ELL) students translated to an 827.8% growth in enrollment from 1997-1998 to 2007-2008 (Batalova & McHugh, 2010). In other states, like Kansas, the percentage of ELL student growth was smaller (128%), but no less significant. Racial identifiers of demographics are also significant. Predictions from the National Center for Education Statistics (2009) indicate that by 2025, almost a quarter of the entire population will be Hispanic, and the rate of growth for the White population will be slower than any other ethnicity (p. 7).

Given these demographics, it is essential that teachers be prepared to address the needs of CLD students, in particular the EL population. Yet, according to the 2008 Schools and Staffing Survey, only 27% of teachers reported having access to professional development that addressed the needs of this population (Wei, Darling-

ISSN: 1937-3929
doi:10.3776/joci.2012.v6n1p25-42

Hammond, & Adamson, 2010). Many researchers argue that a dramatic number of EL students are being denied access to grade-level curriculum because of perceived deficits stemming from their cultural and linguistic backgrounds (Ahlquist, Gorski, & Montaño, 2011; Howard, 2010; Nieto & Bode, 2007; Spring, 2010).

Despite the unpreparedness of many classroom teachers to accommodate the unique assets and needs of EL students, the No Child Left Behind Act (NCLB, 2001) requires that by 2013–2014, all students and target subgroups (e.g., EL students) in Grades 3 through 8 attain 100% proficiency in meeting state standards in reading and mathematics, and that assessments are also administered at least once in high school (Durán, 2008). Given these requirements, the educational system has focused on standardized testing as the primary measure of student achievement (Hursh, 2008; Meier & Wood, 2004; Spring, 2005). However, test scores indicate that for both elementary and secondary EL students, the mandated goals are not being achieved. According to research by Fry (2007), the results of national testing conducted in 2005 revealed that nearly half (46%) of EL students in Grade 4 scored at the *below basic* performance level in mathematics and nearly three quarters (73%) scored below basic in reading. At the secondary level, achievement in mathematics and reading was even lower, with more than two-thirds (71%) of EL students in Grade 8 scoring below basic in both content areas.

These achievement discrepancies are further compounded at the secondary level by organizational constraints such as multiple subject-area teachers per student, lack of staff trained in ESL teaching strategies, and a dearth of research in the area of content-area (versus basic language) instruction for EL students (Ruiz-de-Velasco, Fix, & Clewell, 2000). Many secondary content-area teachers assume that EL students will be taught English in another class (de Jong & Harper, 2005), and many teachers in the upper grades “focus on content mastery and cognitive development without serious attention to the language through which the learning takes place" (p. 109).

Given the persistent achievement gap between EL students and their English fluent peers, this article seeks to answer the following question: How can we create teaching and learning environments that promote the types of classroom conditions and situations at the elementary and secondary levels that research suggests are critical for second language acquisition and content learning? Underlying this question is the assumption that effective teaching environments reflect culturally responsive teaching, often referred to as culturally responsive pedagogy. Such teaching recognizes the importance of including students’ cultural references in all aspects of the learning process (Ladson-Billings, 1994) and building upon the cultural knowledge and prior experiences of EL students to make instruction as appropriate and effective as possible (Gay, 2000).

For over 15 years the faculty and staff at one midwestern university have conducted research on culturally responsive pedagogy with K-12 inservice teachers in the **C**ritically-reflective **L**ifelong **A**dvocacy for **S**econd language learner, **S**ite-specific

ISSN: 1937-3929
doi:10.3776/joci.2012.v6n1p25-42

Innovation, & **C**ross-cultural competency (CLASSIC©) program (Herrera, Murry, & Pérez, 2008; Murry & Herrera, 1999; Penner-Williams, Martinez, Gonzales-Worthen, & Pérez, 2012; Penner-Williams, Pérez, Worthen, Herrera, & Murry, 2010). First developed in 1996, this professional development program model has been replicated successfully in six other states. Teachers involved in CLASSIC have benefitted from long-term, sustainable professional development that incorporates professional learning communities (PLCs) and the application of research and theory specific to the instruction of CLD students. Emphasizing teachers' use of the sociocultural, linguistic, cognitive, and academic biography of the CLD student to guide instructional decision-making and to promote linguistic and academic development, the underlying pedagogical model has become known as *biography-driven instruction* (BDI).

Biography-Driven Instruction

The goal of BDI (Herrera, 2010) is to (a) take into account each individual student's background knowledge, (b) create an instructional ecology that fosters growth from the known to the unknown, and (c) provide a "space" for each student to individually demonstrate his or her learning at the end of the lesson. With its emphasis on all four dimensions of the CLD student biography (sociocultural, linguistic, cognitive, academic), biography-driven culturally responsive teaching addresses the limited attention currently devoted to second language learning issues in the literature and research of culturally responsive pedagogy (Santamaria, 2009). The foundational elements of BDI build on the work of others who have advanced our understanding of the types of classroom conditions that promote second language acquisition and academic achievement. These include:

- Krashen's (1994) input hypothesis—language is acquired "by understanding input containing i+1; that is, by understanding language that contains input containing structures that are a bit beyond the acquirer's current level" (p. 54).
- Marzano's work with learning strategies (Marzano, Gaddy, & Dean, 2000)—categories of instructional strategies that strongly affect student achievement include, among others: activating prior knowledge, nonlinguistic representations, cooperative learning, setting goals and providing feedback, and reinforcing effort and providing recognition.
- Moll's conception of funds of knowledge (Moll, Amanti, Neff, & Gonzalez, 1992)—each student brings a wealth of "historically accumulated and culturally developed bodies of knowledge and skills essential for household or individual functioning and well-being" (p. 133).
- Thomas and Collier's (1997) insights into student realities that affect second language acquisition processes—social and cultural processes, academic development in the first language (L1) and second language (L2), cognitive development (L1 and L2), and language development (L1 and L2) all affect a learner's capacity to acquire English as a second language and succeed academically in school.

ISSN: 1937-3929
doi:10.3776/joci.2012.v6n1p25-42

- Sousa's (2006) knowledge of how the brain learns—the Information Processing Model summarizes how the brain makes sense of new information, highlighting the importance of past experiences and emphasizing both sense and meaning for long-term storage of information.
- Tomlinson's (2001) work with differentiated instruction—differentiation of instruction for individual learners requires attention to content, process, and product.
- Vygotsky's (1978) zone of proximal development—ideal learning conditions exist when students are stretched beyond their actual developmental level to problem solve with the support of more capable peers or the teacher.

When implementing BDI, teachers begin by investigating the biographies of their learners and then consider how best to plan their instruction to capitalize on student assets and meet each learner's unique needs. They create a low-risk learning environment in which students know that the knowledge and skills that they bring to the lesson will be maximized in the learning process. They strategically configure grouping arrangements based on the task and what they know about each student's sociocultural, linguistic, cognitive, and academic background. Teachers are transparent about their instruction: they share with students the roadmap for the lesson, including lesson objectives, activities, and the overall plan for how the learning community will achieve the lesson goals.

BDI supports teachers' implementation of pedagogy that is truly responsive to students' cultures and languages by proposing that the lesson have three distinct, interrelated phases: the Activation Phase (before), the Connection Phase (during), and the Affirmation Phase (after). In each phase, the teacher takes on a slightly different role. In the Activation Phase, students respond to activities and prompts that allow the teacher to activate and pre-assess students' background knowledge (Bauer & Manyak, 2008; Herrera, Murry, & Cabral, 2007; Marzano et al., 2000; Smith, diSessa, & Roschelle, 1994; Tomlinson & McTighe, 2006; Waxman & Tellez, 2002). In BDI, background knowledge is conceptualized as encompassing three knowledge systems: funds of knowledge (home), prior knowledge (community), and academic knowledge (school). The teacher serves as a silent observer, purposefully observing students as they document (using L1, L2, and non-linguistic representations) and discuss with peers their background knowledge. As students work, the teacher records insights that might be useful for bridging between what students already know and the target concepts and vocabulary of the lesson.

In the Connection Phase, the teacher uses his or her overall knowledge of students' biographies as well as insights into their background knowledge (that were gathered in the Activation Phase) to facilitate their construction of knowledge. The teacher "revoices" (Forman, Larreamendy-Joerns, Stein, & Brown, 1998) student contributions to advance both content and language learning. As students engage in activities that integrate speaking, listening, reading, and writing, the teacher also uses pairs and small groups that maximize students' biographies to capitalize on the

ISSN: 1937-3929
doi:10.3776/joci.2012.v6n1p25-42

multifaceted benefits of cooperative learning (Brock & Raphael, 2005; Echevarria, Vogt, & Short, 2008; Meltzer & Hamann, 2004; Waxman & Tellez, 2002).

In the Affirmation Phase the teacher uses authentic assessment (Diaz-Rico & Weed, 2006; Linn & Miller, 2005) to document student gains in content and language. The teacher recognizes each learner's linguistic and academic starting point, and the teacher's feedback communicates a valuing of both incremental progress and demonstrated understanding by the students. The teacher also guides learners to (a) identify ways their background knowledge served as a foundation for their learning during the lesson and (b) reflect on ways they either strengthened or revised their schemas, in light of their new learning.

To support teachers as they apply the pedagogical theory of BDI to their professional practice, BDI strategies were designed. These strategies are briefly described below.

BDI Strategies

BDI has been operationally defined as the application of more than 20 different BDI strategies (Herrera, 2010; Herrera, Kavimandan, & Holmes, 2011) that provide a blueprint to guide and support classroom teachers as they scaffold instruction and explicitly capitalize on students' biographies to advance language and content learning. Each strategy incorporates multiple activities that together provide a solid through-line across the Activation, Connection, and Affirmation Phases of the lesson. Although each strategy supplies a unique structure for the overall learning process, all the strategies guide students to (a) activate their background knowledge, (b) make connections between what they already know and the new vocabulary and concepts, and (c) demonstrate and celebrate their language and content gains. Teachers select a particular strategy for implementation based on the lesson's topic, targeted skills, and learning objectives.

The strategies support CLD learners by providing teachers with a platform for creating the following conditions at any level, PreK–12:

- *Intentional development of a low-risk learning environment,* in which all students, regardless of level of English proficiency, have access to the grade-level curriculum, are provided appropriate supports, and are encouraged to take risks in their use of academic language.
- *Recurrent use of the native language as a resource* to support linguistic and academic development.
- *Leveraging of sociocultural skills and knowledge* to provide the classroom learning community with a diverse range of perspectives on the curricular topics and their impact on society and in the world.
- *Strategic use of student interaction* to enhance comprehensibility of the lesson, provide opportunities for students to negotiate the meaning of academic

ISSN: 1937-3929
doi:10.3776/joci.2012.v6n1p25-42

vocabulary and concepts, and allow students to practice and apply new language and content.
- *Integrated focus on learning strategies* (i.e., cognitive, metacognitive, and social/affective learning strategies; Chamot & O'Malley, 1994) to promote students' autonomy and ownership of their learning.

These conditions promote the type of culturally responsive teaching and learning dynamics that are recognized in educational research and literature as an avenue for ensuring that all students have equitable access to a challenging curriculum designed to ready them for the future (Gay, 2000; Ladson-Billings, 2001; Nieto, 2000).

Measurement of Effective Practice with CLD Students

Researchers at the midwestern university were interested in the effectiveness of the teachers who had completed the five courses within the CLASSIC program and sought a reliable, quantifiable tool to measure the outcomes. Given that BDI is closely aligned with the pedagogical best practices envisioned for *all* students by researchers at the Center for Research on Education, Diversity & Excellence (CREDE), as expressed through the *Standards for Effective Pedagogy and Learning* (CREDE, 2002; Tharp, Estrada, Dalton, & Yamauchi, 2000), CREDE's Standards Performance Continuum (SPC) (Doherty, Hillberg, Epaloose, & Tharp, 2002) became the basis for the development of the Biography-Driven Performance (BDP) Rubric used in this study.

The BDP Rubric retains CREDE's original emphasis on the five standards, which are briefly summarized as follows:

- Joint Productive Activity – Teacher and students producing together
- Language and Literacy Development – Developing language and literacy across the curriculum
- Contextualization – Making meaning: Connecting school to students' lives
- Challenging Activities – Teaching complex thinking
- Instructional Conversation – Teaching through conversation

Although the theoretical foundation of the five standards aligns with the literature on culturally responsive pedagogy, the SPC does not sufficiently allow in-depth investigation of many instructional practices known to support second language acquisition. Elaborations to the SPC, therefore, were established by the midwestern university researchers to ensure explicit attention to research and theory-based practices specific to the needs of second language learners. The resulting BDP tool met the initial goal of a standard measurement to assess implementation of BDI by both elementary and secondary teachers.

ISSN: 1937-3929
doi:10.3776/joci.2012.v6n1p25-42

The Current Study

Secondary teachers face unique challenges in integrating BDI into their educational practices due to the organizational structure of secondary environments (Lucas, 1997; Ruiz de Velasco et al., 2000), attitudes toward inclusion (Karabenick & Noda, 2004; Reeves, 2006), and integration of language instruction with content mastery (de Jong & Harper, 2005). As such, we anticipated that elementary teachers would typically demonstrate higher levels of BDI than secondary teachers. Yet, BDI strategies are designed to provide instructional routines that facilitate BDI in both elementary and secondary classroom environments. Therefore, we expected strategy use to increase both elementary and secondary teachers' enactment of BDI. Furthermore, we predicted that this increase in performance when implementing a strategy would eliminate the difference between elementary and secondary teachers. This reasoning led us to formulate three empirical hypotheses:

> *Hypothesis 1*: Elementary teachers will score higher on BDP on average than secondary teachers when strategies are not used.
> *Hypothesis 2*: Both elementary and secondary teachers will score higher on BDP when implementing a strategy compared to when strategies are not explicitly used.
> *Hypothesis 3*: Elementary and secondary teachers will not show a significant difference in BDP when implementing a strategy into their lesson.

To test these hypotheses, we used the BDP rubric to measure teaching practices in a series of classroom observations of both elementary and secondary teachers enrolled in the CLASSIC program. All teachers were observed once under no instructions to use a strategy, and a second time where they were specifically asked to implement a strategy. This design allowed us to test for differences in BDP associated with grade level and strategy use.

Method

Participants

Fifty-eight general education, grade-level teachers from four urban Midwest school districts participated in the study. All participants were recruited from a cohort of teachers in their fifth and final semester of the CLASSIC program. Participants were informed that we were interested in measuring best practices in the classroom related to their participation in the CLASSIC program. All teachers and school administrators consented to allowing observers to enter their classrooms to collect the data used in the current study. By grade level, our sample consisted of at least one teacher from every grade level. Specifically, we observed 39 elementary school teachers (kindergarten through grade 5) and 19 secondary school teachers (grades 6 through 12). The observed classrooms contained between 2 and 17 CLD students (M = 7.6).

ISSN: 1937-3929
doi:10.3776/joci.2012.v6n1p25-42

BDP Rubric

The BDP rubric is a systematic classroom observation instrument that measures enactment of teaching standards and best practices for culturally responsive teaching (Herrera, Pérez, Kavimandan, Holmes, & Miller, 2011). The BDP has been shown to be a reliable measure (α = .90), and its construct validity has been supported in a known groups study where higher BDP scores were predicted by higher levels of professional development in ESL instruction (Herrera et al., 2011). Two observers collected the BDP data for this study after reaching inter-rater agreement levels above .9 on six jointly scored hour-long field observations of different teachers. According to the procedures described by Herrera et al. (2011), our observers scored complete lessons (approximately one hour in duration) of teachers in the current study.

Teachers' level of enactment of 22 practices characterized by the original five standards (see above) were rated by our observers using a five-point scale (0 - 4) that ranged from low to high levels of enactment. The individual indicators (5 in Joint Productive Activity, 4 in Language & Literacy Development, 3 in Contextualization, 5 in Challenging Activities, and 5 in Instructional Conversation) were developed to more explicitly operationalize constructs from the SPC, as well as additional constructs specific to BDI and effective instruction with CLD students. Enhancements to the SPC found within the BDP Rubric include, among others, teaching practices related to native language support, use of individual student biographies in the three phases of instruction (Activation, Connection, and Affirmation), and the creation of low-risk learning environments. We averaged the individual scores across all items to obtain an overall composite BDP score (α = .90) for each separate observation. The composite BDP score thus represents an overall level of teachers' implementation of culturally relevant teaching practices.

Study Design

A 2 (elementary vs. secondary) x 2 (strategy vs. no strategy) factorial design was used to test our hypotheses about the effects of grade level and strategy use on BDP. Each participant was observed twice; once under the no strategy condition, and once under the strategy condition. For the no strategy condition, teachers were asked not to prepare anything special, but to conduct themselves as they would on any ordinary day. In the strategy condition, teachers were asked to implement one of the instructional strategies they had learned in the CLASSIC program. Nineteen different BDI strategies were used by the teachers in the strategy condition. Observers reported that none of the teachers in the no strategy condition implemented a BDI strategy, while all teachers in the strategy condition used a strategy. Thus, in a mixed measures ANOVA, grade level (elementary vs. secondary) served as a between-groups independent variable, and strategy use vs. no strategy served as the within-groups independent variable. The composite BDP score was the dependent variable operationalizing levels of culturally responsive teaching.

Journal of Curriculum and Instruction (JoCI)
May 2012, Vol. 6, No. 1, Pp. 25-42
http://www.joci.ecu.edu

ISSN: 1937-3929
doi:10.3776/joci.2012.v6n1p25-42

Results

Table 1 presents the mean scores and standard deviations for the BDP strategy and no-strategy conditions, disaggregated by grade level (elementary and secondary) as well as composite scores across all grades.

Table 1

BDP Means and Standard Deviations

	No BDI Strategy		BDI Strategy	
	Mean	SD	Mean	SD
Elementary	2.09	0.45	2.83	0.38
Secondary	1.79	0.52	2.79	0.54
Composite	1.99	0.49	2.82	0.44

Our hypotheses were indeed supported (see Figure 1). As predicted by hypothesis one, we found a significant difference between grade levels in the no strategy condition, such that elementary teachers scored higher than secondary teachers $F(1, 56) = 5.06$, $p = .028$, $\eta_p^2 = .08$. Supporting hypothesis two, results of the mixed measures ANOVA on composite BDP score revealed a large main effect for strategy use, $F(1, 56) = 159.55$, $p < .001$, $\eta_p^2 = .74$, such that the mean BDP score in the strategy condition was higher than the mean BDP score in the no strategy condition when collapsing across grade levels. The main effect of grade level did not reach statistical significance at $p<.05$, $F(1, 56) = 2.50$, $p = .119$, $\eta_p^2 = .04$, indicating a non-significant difference between elementary teachers and secondary teachers when collapsing across conditions. Finally, the condition x grade level interaction approached significance, $F(1, 56) = 3.45$, $p = .069$, $\eta_p^2 = .06$. Because this interaction was theoretically important to hypotheses one and three, we proceeded to probe the simple effects based on the marginal significance of the interaction term.

Additionally, as predicted by hypothesis three, we found no significant difference in mean scores of BDP between grade levels in the strategy condition $F(1, 56) = 0.12$, $p = .73$, $\eta_p^2 = .002$. The combination of the main effect for strategy use and the finding of no difference between grade levels in the strategy condition supports our prediction that both elementary and secondary teachers would score higher on BDP when implementing a strategy, as well as supports our prediction that the BDP difference between elementary and secondary teachers when not using a strategy would be eliminated when teachers used a strategy.

Journal of Curriculum and Instruction (JoCI)
May 2012, Vol. 6, No. 1, Pp. 25-42
http://www.joci.ecu.edu

ISSN: 1937-3929
doi:10.3776/joci.2012.v6n1p25-42

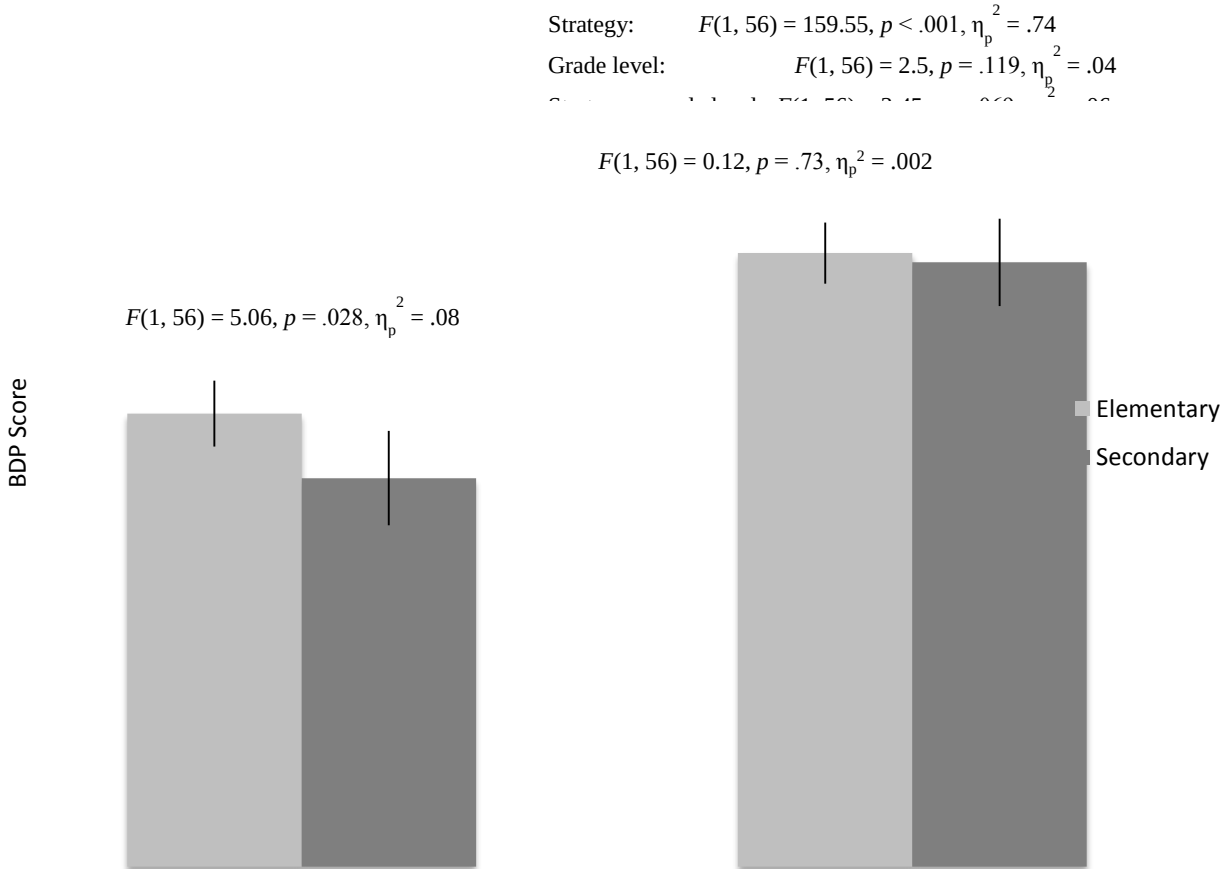

Figure 1. Mean BDP Scores for Elementary and Secondary Teachers. Error bars represent the 95% confidence interval of the mean. Main effect and interaction statistics for the 2 (strategy use) x 2 (grade level) ANOVA appear at the upper right corner of the figure. Test statistics for the simple effects between elementary and secondary teachers appear above the bars for the no strategy and strategy conditions.

Discussion

The results of our study supported all three of our hypotheses. When not using a strategy, elementary teachers demonstrated higher levels of BDI than secondary teachers (Hypothesis 1). Yet both groups improved when implementing a strategy into their lesson as evidenced by the large effect of strategy use (Hypothesis 2). Finally, this improved performance resulted in no significant differences between grade levels when teachers implemented a strategy (Hypothesis 3).

ISSN: 1937-3929
doi:10.3776/joci.2012.v6n1p25-42

The finding that elementary teachers outperformed secondary teachers on the BDP measure warrants further investigation. The existing literature on secondary instruction for ELs suggests that implementing culturally responsive pedagogy that addresses both cultural and linguistic aspects of the student biography would be a greater challenge in secondary classrooms than in elementary classrooms (de Jong & Harper, 2005; Ruiz-de-Velasco et al., 2000; Short, 2002). However, little empirical research has been done to support these conclusions. Our findings, obtained through direct observation and measurement of culturally responsive teaching practices, contribute to this literature by demonstrating, albeit in this limited sample, that secondary teachers may be more limited in their implementation of the kinds of instructional practices that promote content and language learning for CLD students. Most importantly though, our findings suggest that it is possible for secondary teachers to use BDI strategies to improve upon their teaching practices and leverage the sociocultural, linguistic, cognitive, and academic resources of diverse learners.

Since the BDI strategies were found to improve teachers' ability to enact the principles of BDI, future research should explore factors that facilitate teachers' strategy use, especially at the secondary level. Furthermore, it would be useful to examine the effects of strategies on students' educational outcomes. A study by Wessels (2008) suggested that the application of BDI strategies led to higher academic engagement and increased academic vocabulary acquisition. More of this type of research is needed to explore beneficial student outcomes of teachers' use of the BDI strategies.

While our results are encouraging, a couple of important limitations should be noted. First, our study was limited to a small sample of teachers from a single midwestern state. Therefore, replicating this study with a more nationally representative sample would increase our confidence in these findings. Second, it is important to remember that all the teachers in this study were near the completion of a lengthy professional development program, in which they had received extensive training on the theory and practice of biography-driven culturally responsive pedagogy. At the heart of this professional development program is the teachers' use of the CLD student biography to guide instructional decision-making and to promote linguistic and academic development. Thus, these teachers likely had a higher capacity to demonstrate BDI (see Herrera et al., 2011) than teachers from the general population. Therefore, it is important to consider the role of long-term professional development on secondary teachers' enactment of BDI.

Despite these limitations, the current study was designed, in part, to test our prediction that secondary teachers would be less likely to demonstrate theory-into-practice applications of this training than elementary teachers. Our findings confirmed this prediction. Our findings, however, also demonstrated the value of BDI strategies in facilitating secondary teachers' implementation of effective instructional practices for CLD students.

ISSN: 1937-3929
doi:10.3776/joci.2012.v6n1p25-42

Conclusion

The rapidly growing number of culturally and linguistically diverse (CLD) students entering our public school system, along with the persistent gap in achievement between second language learners and their peers, illuminates a critical need for a new pedagogical perspective on teaching and learning, particularly at the secondary level. While many authors and researchers in the field express the benefits of culturally responsive pedagogy for meeting this need, additional efforts must be taken to ensure that the language needs of CLD students also are addressed. BDI provides teachers with a model that emphasizes a holistic understanding of the CLD student. By maximizing students' sociocultural, linguistic, cognitive, and academic dimensions throughout the Activation, Connection, and Affirmation Phases of the lesson, teachers who implement BDI create the types of classroom dynamics that theory and research suggest are essential for CLD students' content and language learning. BDI strategies are designed to provide teachers with a systematic means of applying biography-driven culturally responsive pedagogy in their unique classroom settings.

The results of this study support the extant literature suggesting that secondary teachers face greater challenges than do elementary teachers in implementing effective instruction for CLD students, despite long-term professional development specific to the needs of this student population. Yet, results also indicate that BDI strategies are likely to provide the additional support that secondary educators need as they orchestrate instructional conditions and situations that make their teaching truly responsive to students' assets and needs. This encouraging finding, combined with the finding that BDI strategies also led elementary teachers to improve their instructional practices, indicates the need for further exploration of the impact of BDI strategies on teachers' instructional practices.

As teachers strive to make their own pedagogy more responsive to the needs of individual learners, we recommend that they use BDI as a way to learn more about the four dimensions of their CLD students' biographies as well as the funds of knowledge, prior knowledge, and academic knowledge that they bring to specific lesson topics, concepts, and academic vocabulary. In addition, educators can use the BDI strategies as a structured approach to activating and then maximizing student-specific experiences and knowledge throughout the lesson. For teachers seeking to engage in more reflective practices, the BDP Rubric can serve as a self-assessment tool that allows educators to explore their own instructional practices with CLD students. On a larger scale, the BDP Rubric can be used to measure enactment of BDI principles by gathering data through multiple observations of teachers' instruction. Not only would such measurement be useful to individual teachers, it would also benefit administrators and the school district as a whole. In short, by bringing CLD students to the center of our instructional efforts, we are more likely to see all students reach academic success.

ISSN: 1937-3929
doi:10.3776/joci.2012.v6n1p25-42

References

Ahlquist, R., Gorski, P. C., & Montaño, T. (Eds.). (2011). *Assault on kids: How hyper-accountability, corporatization, deficit ideologies, and Ruby Payne are destroying our schools*. New York: Peter Lang.

Batalova, J., & McHugh, M. (2010). Number and growth of students in U.S. schools in need of English instruction (ELL Information Center Fact Sheet Series, Fact Sheet #1). In *Migration Policy Institute*. Retrieved from http://www.migrationinformation.org/ellinfo/FactSheet_ELL2.pdf

Bauer, E. B., & Manyak, P. C. (2008). Creating language-rich instruction for English-language learners. *The Reading Teacher, 62*(2), 176-178. doi:10.1598/RT.62.2.10 CrossRef GS SEARCH

Brock, C. H., & Raphael, T. E. (2005). *Windows to language, literacy, and culture*. Newark, DE: International Reading Association.

Center for Research on Education, Diversity & Excellence (CREDE). (2002). *The Standards for Effective Pedagogy and Learning*. Retrieved from http://gse.berkeley.edu/research/credearchive/standards/stand_indic.shtml

Chamot, A. U., & O'Malley, J. M. (1994). *The CALLA handbook: Implementing the cognitive academic language learning approach.* Reading, MA: Addison-Wesley.

de Jong, E. J., & Harper, C. A. (2005). Preparing mainstream teachers for English-language learners: Is being a good teacher good enough? *Teacher Education Quarterly, 32*(2), 101-124. GS SEARCH

Diaz-Rico, L. T., & Weed, K. Z. (2006). *The cross-cultural, language, and academic development handbook: A complete K-12 reference guide* (3rd ed.). Boston, MA: Allyn & Bacon.

Doherty, R. W., Hilberg, R. S., Epaloose, G., & Tharp, R. G. (2002). Standards performance continuum: Development and validation of a measure of effective pedagogy. *Journal of Education Research*, *96*(2), 78-89. doi:10.1080/00220670209598795 GS SEARCH

Durán, R. P. (2008). Assessing English language learners' achievements. *Review of Research in Education, 32*(1), 292-327. GS SEARCH

Echevarria, J., Vogt, M. E., & Short, D. (2008). *Making content comprehensible for English language learners: The SIOP model* (3rd ed). Boston, MA: Allyn & Bacon.

ISSN: 1937-3929
doi:10.3776/joci.2012.v6n1p25-42

Forman, E. A., Larreamendy-Joerns, J., Stein, M. K., & Brown, C. A. (1998). "You're going to want to find out which and prove it": Collective argumentation in a mathematics classroom. *Learning and Instruction, 8*(6), 527–548. doi:10.1016/S0959-4752(98)00033-4 CrossRef GS SEARCH

Fry, R. (2007, June). *How far behind in math and reading are English language learners?* Washington, DC: Pew Hispanic Center. Retrieved from http://pewhispanic.org/files/reports/76.pdf

Gay, G. (2000). *Culturally responsive teaching: Theory, research, and practice*. New York: Teachers College Press.

Herrera, S. (2010). *Biography-driven culturally responsive teaching.* New York: Teachers College Press.

Herrera, S. G., Kavimandan, S. K., & Holmes, M. A. (2011). *Crossing the vocabulary bridge: Differentiated strategies for diverse secondary classrooms*. New York: Teachers College Press.

Herrera, S., Murry, K., & Cabral, R. M. (2007). *Assessment accommodations for classroom teachers of culturally and linguistically diverse students*. Boston, MA: Allyn & Bacon.

Herrera, S. G., Murry, K. G., & Pérez, D. R. (2008). CLASSIC: Transforming hearts and minds. In M. E. Brisk (Ed.), *Language, culture, and community in teacher education* (pp. 149-173). Mahwah, NJ: Lawrence Erlbaum/Taylor & Francis Group for the American Association of Colleges of Teacher Education.

Herrera, S. G., Pérez, D. R., Kavimandan, S., Holmes, M. A., & Miller, S. S. (2011, April). *Beyond reductionism and quick fixes: Quantitatively measuring effective pedagogy in the instruction of culturally and linguistically diverse (CLD) students*. Paper presented at the annual conference of the American Educational Research Association, New Orleans, LA.

Howard, T. C. (2010). *Why race and culture matter in schools: Closing the achievement gap in America's classrooms*. New York: Teachers College Press.

Hursh, D. (2008). *High-stakes testing and the decline of teaching and learning: The real crisis in education*. Lanham, MD: Rowman & Littlefield.

Karabenick, S. A., & Noda, P. C. (2004). Professional development implications of teachers' beliefs and attitudes toward limited English proficient students. *Bilingual Research Journal, 28*(1), 55-75. doi:10.1080/15235882.2004.10162612 CrossRef GS SEARCH

ISSN: 1937-3929
doi:10.3776/joci.2012.v6n1p25-42

Krashen, S. D. (1994). Bilingual education and second language acquisition theory. In C. F. Leyba (Ed.), *Schooling and language minority students: A theoretical framework* (2nd ed., pp. 47–75). Los Angeles, CA: Legal Books.

Ladson-Billings, G. (1994). *The dreamkeepers: Successful teachers for African-American children*. San Francisco, CA: Jossey-Bass.

Ladson-Billings, G. (2001). *Crossing over to Canaan: The journey of new teachers in diverse classrooms*. San Francisco, CA: Jossey-Bass.

Linn, R. L., & Miller, M. D. (2005). *Measurement and assessment in teaching* (9th ed.). Upper Saddle River, NJ: Prentice Hall.

Lucas, T. (1997). *Into, through, and beyond secondary school: Critical transitions for immigrant youths.* Washington, DC: Center for Applied Linguistics.

Marzano, R. J., Gaddy, B. B., & Dean, C. (2000). *What works in classroom instruction*. Aurora, CO: Mid-continent Research for Education and Learning (McREL).

Meier, D., & Wood, G. (Eds.). (2004). *Many children left behind: How the No Child Left Behind Act is damaging our children and our schools*. Boston, MA: Beacon Press.

Meltzer, J., & Hamann, E. T. (2004). *Meeting the literacy development needs of adolescent English language learners through content-area learning. Part one: Focus on motivation and engagement*. Providence, RI: The Education Alliance, Brown University.

Moll, L. C., Amanti, C., Neff, D., & Gonzalez, N. (1992). Funds of knowledge for teaching: Using a qualitative approach to connect homes and classrooms. *Theory into Practice, 31*(2), 132-141. doi:10.1080/00405849209543534 GS SEARCH

Murry, K., & Herrera, S. (1999). CLASSIC impacts: A qualitative study of ESL/BLED programming. *Educational Considerations, 26*(2), 11-19.

National Center for Education Statistics (NCES). (2009). Characteristics of public, private, and Bureau of Indian Education elementary and secondary schools in the United States: Results from the 2007-08 schools and staffing survey. Retrieved from http://nces.ed.gov/pubs2009/2009321/tables/sass0708_2009321_s12n_02.asp

National Clearinghouse for English Language Acquisition and Language Instruction Educational Programs. (2010). The growing numbers of English learner students

ISSN: 1937-3929
doi:10.3776/joci.2012.v6n1p25-42

1997/98-2007/08. Retrieved from http://www.ncela.gwu.edu/files/uploads/9/growingLEP_0708.pdf

Nieto, S. (2000). *Affirming diversity: The sociopolitical context of multicultural education* (3rd ed.). New York: Addison Wesley Longman.

Nieto, S., & Bode, P. (2007). *Affirming diversity: The sociopolitical context of multicultural education* (5th ed.). Boston, MA: Allyn & Bacon.

No Child Left Behind Act, 20 U.S.C. § 6310 et seq. (2001).

Penner-Williams, J., Martinez, T., Gonzales-Worthen, D., & Pérez, D. (2012). CLASSIC professional development for teachers of culturally and linguistically diverse students. In A. Honigsfeld & A. Cohan (Eds.), *Breaking the mold of education for culturally and linguistically diverse students.* Lanham, MD: Rowman & Littlefield.

Penner-Williams, J., Pérez, D., Worthen, D. G., Herrera, S., & Murry, K. (2010). A CLASSIC approach to collaboration: Documenting a multi-state university and multi-school district partnership. In J. J. Slater & R. Ravid (Eds.), *Collaboration in education* (pp. 161-167). New York: Routledge.

Reeves, J. R. (2006). Secondary teacher attitudes toward including English-language learners in mainstream classrooms. *Journal of Educational Research, 99*(3), 131-142. GS SEARCH

Ruiz-de-Velasco, J., Fix, M., (with Clewell, B. C.). (2000). *Overlooked & underserved: Immigrant students in U.S. secondary schools*. Washington, DC: The Urban Institute.

Santamaria, L. J. (2009). Culturally responsive differentiated instruction: Narrowing gaps between best pedagogical practices benefitting all learners. *Teachers College Record, 111*(1), 214-247. GS SEARCH

Short, D. (2002). Language learning in sheltered social studies classes. *TESOL Journal*, *11*(1), 18-24. doi:10.1002/j.1949-3533.2002.tb00062.x GS SEARCH

Smith, J. P., II, diSessa, A. A., & Roschelle, J. (1994). Misconceptions reconceived: A constructivist analysis of knowledge in transition. *Journal of the Learning Sciences, 3*(2), 115-163. doi:10.1207/s15327809jls0302_1 CrossRef GS SEARCH

Sousa, D. A. (2006). *How the brain learns* (3rd ed.). Thousand Oaks, CA: Corwin Press.

Spring, J. (2005). *The American school: 1642 – 2004* (6th ed.). New York: McGraw-Hill.

ISSN: 1937-3929
doi:10.3776/joci.2012.v6n1p25-42

Spring, J. (2010). *Deculturalization and the struggle for equality: A brief history of the education of dominated cultures in the United States* (6th ed.). New York: McGraw-Hill.

Tharp, R. G., Estrada, P., Dalton, S. S., & Yamauchi, L. (2000). *Teaching transformed: Achieving excellence, fairness, inclusion, and harmony*. Boulder, CO: Westview Press.

Thomas, W. P., & Collier, V. P. (1997). *School effectiveness for language minority students* (NCBE Resource Collection Series No. 9). Washington, DC: National Clearinghouse for Bilingual Education.

Tomlinson, C. A. (2001). *How to differentiate instruction in mixed-ability classrooms* (2nd ed). Alexandria, VA: Association for Supervision and Curriculum Development.

Tomlinson, C. A., & McTighe, J. (2006). *Integrating differentiated instruction and understanding by design: Connecting content and kids*. Alexandria, VA: Association for Supervision and Curriculum Development.

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

Waxman, H. C., & Tellez, K. (2002). *Research synthesis on effective teaching practices for English language learners*. Philadelphia, PA: Mid-Atlantic Laboratory for Success.

Wei, R. C., Darling-Hammond, L., & Adamson, F. (2010). *Professional development in the United States: Trends and challenges*. Dallas, TX: National Staff Development Council.

Wessels, S. (2008). *IBA vocabulary framework: **I**gnite, **B**ridge & **A**ssociate vocabulary development for culturally and linguistically diverse students* (Unpublished doctoral dissertation). Kansas State University, Manhattan.

About the Authors

Della Pérez, Ph.D., is an Assistant Professor in the College of Education and the Associate Director of Undergraduate Programming at the Center for Intercultural and Multilingual Advocacy (CIMA) at Kansas State University. Her research emphasizes preservice and inservice teacher preparation for serving culturally and linguistically diverse student populations and literacy development for English language learners. E-mail: dperez@ksu.edu

ISSN: 1937-3929
doi:10.3776/joci.2012.v6n1p25-42

Melissa A. Holmes, **M.S.,** is an instructor and program coordinator at the Center for Intercultural and Multilingual Advocacy (CIMA) in the College of Education at Kansas State University. Her research interests include biography-driven culturally responsive pedagogy in secondary and post-secondary settings, literacy instruction for adult second language learners, and the preparation of teacher candidates for success with diverse classroom populations. E-mail: melissa@ksu.edu

Stuart S. Miller, B.S., is a graduate student in psychology at Kansas State University and a research assistant at the Center for Intercultural and Multilingual Advocacy (CIMA) in the College of Education. His research interests include attitudes relating to diversity programming in higher education and prejudice. E-mail: ssmiller@ksu.edu

Cristina Fanning, M.S., is an Associate Director/Instructor at the Center for Intercultural and Multilingual Advocacy (CIMA) in the College of Education at Kansas State University. She is currently a Ph.D. candidate in Curriculum and Instruction, with her research focusing on the intersection of biography-driven culturally responsive teaching with the epistemological and ontological worldviews of secondary social studies teachers. Additional research interests include educational history and philosophy, critical theories as related to school curriculum, and culturally responsive teaching for 21st century skills. E-mail: cris@ksu.edu