

Challenges and Supports for English Language Learners in Bilingual Programs

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The broad impact on American public education of the 2010 Common Core Standards and the frameworks for K-12 science education (National Research Council, 2011) cannot be overstated. Indeed the Common Core has now been officially adopted in 41 states, and unofficially in two more (ASCD, 2012), which is as close to a national set of English language arts and mathematics standards as American public education has come in generations. The new K–12 science frameworks also represent a fundamental paradigm shift as instructional practice becomes focused on the intersections between the doing of science and the language of science.

The Common Core and the new science standards (the combination of which we will henceforth refer to as the New Standards) have in common a focus on the integration of language and literacy into content area instruction. Specifically, the Common Core Standards require that students read and comprehend texts, particularly informational texts, with increasing levels of complexity. Students should be able to write narratives, informational and explanatory essays, and arguments. They also should be able to use their oral language skills to work collaboratively, understand multiple perspectives, and present their own ideas (see Bunch, Kibler & Pimentel, 2012). In the area of mathematics, the New Standards support (a) promotion of mathematical conceptual and procedural understanding, (b) presentation of rigorous mathematical tasks, (c) development of beliefs that mathematics is worthwhile and doable, and (d) engagement of students in different mathematical practices (see Moschkovich, 2012). To carry out mathematical learning, students must be able to use and understand mathematical language. The Next Generation Science Standards set forth similarly high levels of cognitive and linguistic demands for learning and teaching (See Lee & Quinn, 2012 for full discussion).

The role of language in the New Standards is profound, which has implications for English learners' access to them, particularly when instruction is in English only. Indeed, published guidance on applying the Common Core for English learners (<http://www.corestandards.org/assets/application-for-english-learners.pdf>) acknowledges the potential leveraging role of students' native languages alongside the vast heterogeneity in the ELL population. Yet implicit in the guidance is the presumption that instruction will take place in English only. There is, however, abundant research showing that well-implemented and high-quality bilingual education programs worldwide succeed in educating language minority and majority students (August & Hakuta, 1997; Brisk, 2005, 2006; Cummins, 1999; Cummins & Corson, 1997; Gomez, Freeman, & Freeman, 2010; Lindholm-Leary, 2001). With the rising

interest in high academic achievement that includes high levels of language and literacy development, bilingual education should be considered as a viable form of education to reach the goals expressed in the New Standards. This paper summarizes the affordances of, and challenges to, implementing native language and English instructional programs as they pertain to implementation of the New Standards.

Affordances of Bilingual Programming

The use of students' native languages by teachers and other students has been associated with better social skills and students' well-being in schools (Chang et al., 2007). Moreover, a bilingual setting defines "students' linguistic and cultural resources as assets" (Michael, Andrade, & Barlett, 2007, p. 169), positioning students as successful from the start. In bilingual schools, the norm is bilingualism, posing no threat to students' identity. In monolingual schools, students often struggle with cultural adaptation, unsure of whether they should or should not make apparent their other language and culture (Phelan, Davidson, & Yu, 1998). Further, the presence of bilingual personnel facilitates students' immediate connection with adults in the school without having to wait to master English.

These professionals provide a strong in-house model of academically successful bilingual adults (Garcia & Bartlett, 2007; Michael et al., 2007). High quality bilingual programs that promote learning of and in two languages are a prime educational setting to support the new content and language demands of the New Standards. These programs (1) facilitate language, literacy, and content-area learning by providing students with the opportunity to function in the language in which they can best carry out relevant tasks and (2) promote high levels of bilingualism which positively impact literacy and cognitive development consistent with the demands of the New Standards.

Linguistic Facilitation. Bilingual programs, which have grown increasingly rare in recent years, offer great affordances in easing the implementation of the New Standards because teaching and learning, particularly in the content area, occur in the language in which the student is most fully proficient. Thus students are far more likely to be able to access the complex integration of language and content that characterizes the New Standards. In the area of literacy, research has demonstrated the positive impact of acquisition of reading through the first language (L1) (Garcia, 2000). Furthermore, L1 reading proficiency has been consistently shown to be associated with second language (L2) reading and writing irrespective of native language (Cummins, 1991; Proctor, August, Snow, & Barr, 2010). However, such associations are strongly linked with degrees of L2 proficiency, which underscores the need for bilingual programs to be actively developing both L1 and L2.

The New Standards for oral language expect students to present their own thinking and understand others' perspectives (see Bunch et al., 2012). Classroom interactions that permit negotiation of ideas and meaning encourage this kind of learning. In environments that promote bilingualism students are less likely to feel inhibited to participate because all linguistic channels

are open for use, which allows for free codeswitching and thus concentration on the topic rather than struggling to find the words (Garcia & Bartlett, 2007). Further, when students are functioning in a weaker language, their acquisition of content becomes more challenging (see Bunch, et al., 2012; Lee & Quinn, 2012; Moschkovich, 2012). When English learners are exposed to content instruction in the stronger language, they are more likely to grasp the concepts of instruction, which sets the stage for promoting second language acquisition. With the conceptual foundations established via the native language, English language instruction can begin to draw students' attention to more salient aspects of second language acquisition, including syntactic, semantic, and morphological development. As these components of English develop, the access to the New Standards provided through native language instruction should begin to manifest cross-linguistically.

In sum, drawing on all the students' linguistic resources allows them to function at a higher cognitive and age-appropriate level (Milk, 1990). As a consequence, academic rigor is not sacrificed because of limited language proficiency (Garcia & Bartlett, 2007).

Benefits of Bilingualism. The New Standards are compelling for a number of reasons, not the least of which being that they require students and teachers to pay strict attention to language and how it is used. For example, in Grade 5, the Language standard L.5.3 requires students to compare and contrast varieties of English (such as dialects and registers). In Grade 8, students must use context to derive word meanings, make morphological inferences, and infer meanings from definitions (Standard L.8.4). Finally, in Grades 11–12, Standard L.11-12.5, students are expected to interpret figures of speech and analyze their role in text. These skills are highly *metalinguistic* in nature; that is, they require that students be particularly attentive to the features and uses of language. In addition, the New Standards require students to understand symbolic representation and to problem solve. The literacy embedded in content standards for grades 6–12 make this abundantly clear as students must be able to integrate visual information into their written texts (RH.6 – 8.7), “[t]ranslate quantitative or technical information expressed in words in a text into visual form (e.g., a table or chart) and translate information expressed visually or mathematically (e.g., in an equation) into words” (RST.9-10.7), and to represent and interpret mathematical data (5.MD).

In a recent meta-analysis of the cognitive correlates of bilingualism, Adesope, Lavin, Thompson, and Ungerleider (2010) found overall effects for bilingualism, irrespective of SES, on two major areas: metalinguistic and metacognitive awareness; and symbolic representation, attentional control, and problem solving. Moderator analyses indicated that Spanish-English bilinguals were highly likely to derive metalinguistic and metacognitive benefits from bilingualism, whereas French-, Chinese-, and Tamil-English bilinguals were more likely to see enhanced aptitudes in the second realm of symbolic representation, attentional control, and problem solving. The links between bilingualism and the metalinguistic and problem-solving foci of the New Standards should be highlighted as highly congruent with one another. Indeed, successful bilingual programs that attend to strong L1 and L2 development, and to comparing and contrasting languages of instruction, may in fact accelerate meeting the demands of these highly language-based New Standards.

Additional Benefits. The New Standards, and particularly the New Science Standards, make the important point of promoting equity in science instruction in the United States. Specifically, the panel for the K-12 Education Frameworks argued that children who hail from varied cultural backgrounds bring with them specific knowledge about events and phenomena that are foundations upon which to build. Bilingual programs are uniquely positioned to support students who speak languages other than English in these ways. Interactions between adults and children differ among people of different cultural backgrounds (Conklin & Lourie, 1983; Heath, 1983) and these norms carry into classroom settings with positive or negative consequences. Bilingual-bicultural classrooms more typically accept and understand students' ways of behaving and talking derived from their heritage culture. Acceptance of these ways invites these learners to engage in classroom discourse and as a consequence in learning (Jordan, Tharp, & Baird-Vogt, 1992; Phillips, 1972). Ballenger (1997), for example, argued that allowing Haitian children to incorporate their personal and moral standing in science discussions actively engaged these students in discussion and learning. Although the science was embedded in the students' personal experiences, they were able to keep their focus on the science questions. Eventually students appropriated the science discourse that typically shies away from the personal and moves toward the objective.

Challenges in Bilingual Programming

While there are many benefits inherent to bilingual programming and their applications to the New Standards, there are some clear challenges that bilingual programs face that operate at federal, state, district, and school levels. One enduring challenge is the prevailing folk notion in most regions of the U.S. that literacy and content learning in a language other than English is simply time spent *not* learning English. Such English-only perspectives have been foisted on state-level educational systems in recent years, and have made the implementation of bilingual programs particularly challenging in some states. Still, bilingual education programs do exist in many states, and here we characterize the challenges of ensuring quality implementation of the New Standards across three domains: assessment, teacher training, and curriculum and materials development.

Assessment. Assessment paradigms are troublesome in the realm of bilingualism, as the challenge to aligning standards to actual test items is compounded when two languages are candidates for the medium of assessment (see Bailey & Wolf, 2012). A good deal of research has uncovered the problematic issues of construct irrelevance with respect to bilingualism and testing, such that issues of language and culture obscure the basic constructs that are presumably being assessed. These issues are crucial when developing assessment items (Solano-Flores & Nelson-Barber, 2001) and evaluating student responses to assessments in the content areas (Luykx et al., 2007; Martiniello, 2008, 2009; Penfield & Lee, 2010). Failure to attend to both cultural and construct validity across the assessment process will invariably result in construct-irrelevant variance in which a student's score likely underestimates his or her knowledge of the construct being assessed (Solano-Flores & Nelson-Barber, 2001).

Abedi and Liquanti (2012) suggest that one way in which to reduce such construct-irrelevant invariance is to provide native language versions of tests, whether they are exclusively in the L1 or in side-by-side assessments with bilingual glossaries. Abedi and Liquanti (2012) also suggest that L1 assessments are most useful for students in bilingual programs who possess low English proficiency. However, it might also be argued that children who have been instructed in two languages, irrespective of English language proficiency, would benefit from having choice of assessment language, even at the item level. This notion of a side-by-side assessment option is clearly problematic, as assessments across languages cannot be made parallel through simple translation. Be that as it may, with the implementation of the New Standards, we have an opportunity to address, support, and validate bilingual assessments, assessments given in the first language that are aligned to the New Standards, and alternative assessments in L2 for English learners at different proficiency levels that will allow them to demonstrate mastery of the Standards themselves.

Teacher Training. Despite the potential affordances of quality instructional programs that promote bilingualism, the New Standards also pose challenges that need to be considered when preparing teachers for bilingual education programs. Research has suggested that successful teachers of bilingual learners need knowledge of the students, the content, the language, and effective practices. They also must understand and have experienced second language learning and have positive attitudes toward bilingual learners (Clayton, 2008; Lucas & Villegas, 2011). The New Standards pose additional demands. Well-prepared teachers need to demonstrate knowledge of the language of instruction to levels consistent with the demands of the literacy and content standards. They need to be prepared to support students when analyzing and producing texts of increasing cognitive and linguistic demand. They need to use the language of the content areas to support historical, mathematical, or scientific conversations, as well as understand and produce texts in these content areas.

Curriculum and Materials Development. Curricula and materials in both languages must foster and support the demands made by the New Standards. Coleman and Pimentel (2011) propose a series of criteria for materials to align with the New Standards. They recommend high-quality texts that provide a range in complexity. These texts should include high-quality text-dependent questions and tasks that support development of academic vocabulary. These materials should promote analysis of texts to provide evidence for argumentation and should support informational and argumentative writing, as well as the production of research projects. They should encourage engagement in academic discussions, coverage of grammar and language conventions, and the use of multimedia and technology. For bilingual education programs, this means that the materials in both languages must follow these criteria. This is a serious challenge, especially for materials in the languages other than English.

Concluding Thoughts

Bilingual education and bilingual educators have an opportunity to play an important role in the context of the New Standards because these programs and their teachers have always had at the core of their instruction language and literacy development, including academic language to function in various curricular areas. In turn, the New Standards can positively influence these programs and educators by stressing that content acquisition is as important as language acquisition.

Bilingual education that is high quality and that promotes full development of two languages goes beyond just leveraging the native language of students in service of better English. It provides an ideal and desirable context to promote the demands of content and language learning of the New Standards by allowing students to use all their language and cultural resources. Finally, bilingual schooling prepares individuals to function in a global society, which has become a cornerstone of education in the twenty-first century.

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