### Exploring the Influence of 21st Century Skills in a Dual Language Program: A Case Study

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Preparing students as 21st century learners is a key reform in education. The Partnership for 21st Century Skills developed a framework that identifies outcomes needed for successful implementation of rigorous standards. The Dual Language (DL) program was identified as a structure for reform with systems and practices which can be used to prepare students for the 21st century. The purpose of this study was to explore the systems and practices within a DL program that support development of 21st century skills in a southern California school district at an elementary school, middle school, and high school. Data were collected through interviews, focus groups, and document review and were coded to reveal six themes. Themes pertaining to Research Question One were: systems that advanced 21st century skills, and structures for collaboration. Leadership, development of community, and shared beliefs were themes that were germane to Research Question Two.

#### Introduction

The advent of the information age has encouraged an atmosphere conducive to educational reform (Fullan, Langworthy, & Barber, 2014). The positive educational reforms are those that developed innovative systems that will equip all students with the necessary skills to be successful in the 21<sup>st</sup> century. The Common Core State Standards (CCSS) were developed to prepare students for college and career upon graduation and have been adopted in 43 states (Common Core State Standards Initiative, 2014). The non-profit agency, Partnership for 21st Century Skills (P21), has put forth a framework to support the implementation of the CCSS (Partnership for 21st Century Skills, 2006a). The P21 framework categorizes student outcomes into four themes: (1) "Life and Career Skills"; (2) "Learning and Innovation Skills—4Cs"; (3) "Information, Media, and Technology Skills"; and (4) "Core Subjects and 21st Century Themes" (Partnership for 21st Century Skills, 2011a, p. 2). Among the various desired competencies listed in the four themes, multilingual communication, problem solving in authentic learning environments, and finding value in varied cultures are included. These listed competencies are identified as needed 21<sup>st</sup> century skills by various researchers such as Fullan et al. (2014), Suárez-Orozco and Suárez-Orozco (2009), and Darling-Hammond (2014). This study shows ways the aforementioned competencies connect with the goals of the Dual Language (DL) program.

The DL program is an educational program model that comprises distinct systems and structures which support literacy in two languages for English Learners (ELs) as well as for English dominant students. These structures include specific language instructional models and progressions (Cloud, Genesee, & Hamayan, 2000; Collier & Thomas, 2004; Freeman, Freeman, & Mercuri, 2005; Skutnabb-Kangas & McCarty, 2010). The underlying principles of the DL program are clear goals for language acquisition and a consistent message that the students' native language and culture are resources instead of an obstacle (Gandara & Contreras, 2009; Gandara & Gomez, 2008; García & Baetens Beardsmore, 2009; Garcia, 2011; Lindholm-Leary, 2001; Ray, 2008; Thomas & Collier, 1997a).

Practices are distinguished from systems or structures in two distinct ways. First, practices are the actions of participants of an organization to implement a system or program. Secondly, there is a personal quality of practices. A practice is the manner in which an individual chooses to implement or participate in a system or structure. Unlike systems, practices include an individual's beliefs, feelings of connection, and professional capacity (Hargreaves & Fullan, 2013).

The purpose of this case study was to identify the systems and key practices of a DL program that enhanced the acquisition of 21<sup>st</sup> century skills. The purpose was explored through two research questions:

- 1. What are the key systems of a K-12 Dual Language program that were pivotal in the development of 21<sup>st</sup> century skills?
- 2. What are the significant ways systems are being practiced by educational leaders and teachers at various levels to promote 21<sup>st</sup> century learning in a Dual Language program?

The research questions guided the exploration of the systems and practices of a DL program across school levels in a single district.

# **Theoretical Framework**

Systems theory provided a framework with which to examine DL program structures as well as to assess methods of implementation, or practices, that support a program's effectiveness (Banathy, 1991; Duffy, 2010). Implementation at the macro, meso, and micro levels were studied to further develop an organizational analysis of the schools (Wagner & Hollenbeck, 2009). Within systems theory, studies of organizational behavior identify three levels to develop the analysis of an organization; macro, meso, and micro. Wagner and Hollenbeck (2009) discussed the importance of examining each level of an organization in order to provide suitable solutions or make an organizational structure more efficient. At the macro level, the overall power structures, symbolic culture, and values of the members are found in the organization's guiding systems. In an educational setting, the macro level includes Federal and State agencies and the local school district. These boundaries are defined by laws, board policies, district history, culture, and practices that influence the meso level of organizations.

The bridge between the macro and micro levels is the meso level. The meso level is comprised of subgroups within the groups found at the macro level (Wagner & Hollenbeck, 2009). At the meso level, the organization focuses on developing means to collaborate efficiently in order to realize a shared vision. There are systems for creating opportunities for interactions, managing teams to work well together, and practicing a distributed leadership model. These interactions emphasize human relationships and the examination of practices through collaboration (Brooks & Kensler, 2011; Spillane, Halverson, & Diamond, 2001). Lambert (2002, 2005) discussed the implementation of a distributed or shared leadership model that supports sustainability of a school program. Spillane et al. (2001) wrote that, "From a distributed [leadership] perspective, it is the collective interaction among leaders, followers, and the situation that are paramount" (p. 4). Distributed leadership promotes the authority to make decisions as well as the accountability for the results of the decisions "close to the classroom" to impact the instructional environment (Darling-Hammond, 2002, p. 52).

The subgroups at the meso level, in turn, are comprised of individuals at the micro level of the organization. At the micro level, attaining the shared vision is effected by developing professional capacity, motivating individuals, and applying individual skills to the group effort. The addition of the three levels of macro, meso, and micro in the study of organizational systems contributes to a more robust understanding of the complexities involved in school reform. This case study explored the key practices of a DL program at the macro, meso, and micro levels, as evidenced in one town's district and school-wide policies. The researcher analyzed the schools' systems for implementing and communicating the vision among the DL groups, and the individual participant's involvement in the DL program.

# **Review of the Literature**

A review of the literature reveals two components of an effective DL program: (1) clear goals for language acquisition and (2) non-English native languages as resources. Each of the components are presented with various studies from DL programs. An analysis of the intersection of the components of an effective DL program and 21<sup>st</sup> century skills as outlined in the *P21Framework*, three common areas were identified to provide direction to the study. First, both DL programs and the *P21 Framework* value multilingual communication, which is defined by P21 as a basic skill, intended to promote innovation. A second area of overlap is the application of technology in a diverse, multicultural environment. The final area of overlap is the mutual goal of integrating the 21<sup>st</sup> century concepts of multilingualism, global awareness, and civic literacy during instruction in order to prepare students with viable competencies in the everchanging international economy. The commonalities between the DL program and 21<sup>st</sup> century skills are significant in demonstrating that the DL program is a beneficial system for educational reform.

#### **Clear Goals for Language Acquisition**

In a study that investigated the impact of DL programs on student achievement and closing the achievement gap, Collier and Thomas (2004) identified DL programs as enrichment programs in which the goal was to support students' proficiency in both their native and second languages. This perspective is different from one which considered older bilingual program models generated after the original ESEA authorization as a remediation program where the goal was to bridge the language gap for ELs with proficiency in their native language.

The researchers followed students over a period of 18 years, collecting qualitative data regarding their experiences with DL programs that were a part of school reform policy. They also combined the quantitative and qualitative data from two previous articles published in 1997 and 2002 (Thomas & Collier, 1997a, 2002). Additional data from these previous studies were included to obtain a large sample size to "better assess the true program effect sizes" (Collier & Thomas, 2004, p. 4).

Based on longitudinal data from Texas and Maine, Collier and Thomas (2004) found that DL programs were the only programs that narrowed the achievement gap for ELs between fifth and seventh grade. In addition to the quantitative data, the qualitative data demonstrated that implementation of DL programs as part of school reform led to a greater respect for multiculturalism, and built capacity in staff members through goal planning and the implementation process. Sustaining DL programs required strong, consistent leadership as well as parents who were welcomed partners in the school community.

The research by Collier and Thomas (2004) also identified characteristics of effective DL programs. The characteristics included clear goals and reliable implementation of the program, respect for student heritages, a strong culture of achievement, and stakeholder involvement. Skutnabb-Kangas and McCarty (2010) emphasized, "The most successful bilingual programs are those that aim to develop bilingualism and biliteracy" (p. xv). The acquisition of a second language has a broader impact on learning beyond the ability to speak, read, and write two languages. In addition to language transfer, researchers have found an increased cognitive executive function in bilingual students (Bialystok, 1991, 2001; Foy & Mann, 2013; Stocco, Yamasaki, Natalenko, & Prat, 2012). The term *executive function* refers to using seemingly unrelated skills to strategize and complete a new task. Executive function tasks include "shifting between mental sets or tasks…, updating and monitoring of working memory contents," and "inhibiting" impulsive or superfluous responses (Miyake et al., 2000, p. 86).

Stocco et al. (2012) found that "bilingualism translates into a domain-general advantage in cognitive function" (p. 2). Studies have revealed that bilingual students have an advantage in non-verbal tasks where instructions are given through visual or auditory methods (Foy & Mann, 2013; Stocco et al., 2012). Stocco et al. (2012), concluded that speaking more than one language "trains the brain" to switch between tasks and to simultaneously manage different sets of information (p. 3). The impact of DL programs, therefore, transcends language learning to include extending modes of cognition.

In DL programs, the goals for language acquisition focus on enrichment rather than remediation (Alanis & Rodriguez, 2008; Collier & Thomas, 2004). The concept of clear goals is a time-tested concept which applies to the effectiveness of any organizational structure (Bolman & Deal, 2008; Darling-Hammond, LaPointe, & Meyerson, 2009; Fullan, 2001; Fullan et al., 2014). Building DL programs around clear goals for bilingual language acquisition creates a culture where language is both the ends, and the means, for learning (Fullan, 2001). Paramount to the success of DL programs are the clear vision for implementation and the importance of participants' implementation and interaction at the macro, meso, and micro levels demonstrate that strong structures examined through the cycle of inquiry.

**Native language as a resource.** Several scholars, such as Freeman (1994), Lindholm-Leary (2001), and Alanis and Rodriguez (2008), have examined the effect of treating native languages other than English as resources for student achievement. Alanis and Rodriguez (2008) conducted case study research of a single school to "explore the factors that may have contributed to the success and sustainability of one dual language program in an inner city, urban-diverse campus" (Alanis & Rodriguez, 2008, p. 307). They asked whether the teacher outlook regarding objectives and instructional standpoint had an impact on student achievement, and which, if any, practices contributed to sustainability of the DL program. Specifically, the researchers examined the manner in which the teachers viewed "challenges as opportunities" (p. 306) in order to offer a DL program as an additive bilingual language program for both EL and English dominant students.

Alanis and Rodriguez (2008) identified four factors necessary for the sustainability of the DL program: "pedagogical equity, effective bilingual teachers, active parent participation, and knowledgeable leadership and continuity" (p. 312). Pedagogical equity referred to giving equal value to English and Spanish as well as applying rigorous standards in Spanish as the first language of instruction. Pedagogy, however, would not have an impact without effective

bilingual teachers who implement a "culturally relevant" curriculum through active collaboration and with many opportunities for student communication (p. 313).

Using students' native languages as a resource does not mean devaluing the language; rather a key tenet of DL programs is to convey the value of each of the languages (Freeman, 1994; Lindholm-Leary, 2001). One of the goals is to maintain two languages through structured communication and collaboration (Alanis & Rodriguez, 2008; Estrada, Gómez, & Ruiz-Escalante, 2009; Ray, 2008; Thomas & Collier, 1997b, 2003). DL programs have been described as an additive program, which means increasing students' bilingual abilities. This is in opposition to a traditional single language classroom experience for ELs where the process is subtractive—the sole focus is on English proficiency for students which results in the loss of native language (Thomas & Collier, 1997b). Alanis and Rodriguez (2008) described the additive approach as *pedagogy equity* wherein the two languages become a natural and a celebrated part of students' daily school routine.

Olsen (2010) also advocated for developing the home language of an EL student "to teach students issues of contrastive analysis and transfer across the two languages" as a response to the growing number of students designated as Long-term English Learners (p. 32). Thomas and Collier (2002) also advocated for student placement in a program that maintains the student's native language while the student learns English as an effective instructional strategy that supports the acquisition of English (Thomas & Collier, 2002). DL programs therefore serve as enrichment programs that support achievement in two languages rather than treating the native language as a gap which requires remediation (Collier & Thomas, 2004).

Pedagogical equity is also advanced by the balance of enrollment in each classroom wherein half of students are English dominant and the other half are dominant in the partner language (Thomas & Collier, 1997b). This balance engages both sets of students beyond learning from the teacher. The English dominant students and the Spanish dominant students serve as language models for each other during group work or on the playground (Estrada et al., 2009; García & Baetens Beardsmore, 2009). The students develop interdependence as they learn language and interact socially (Banathy, 1991). As Gandara and Contreras (2009) stated, "Importantly, researchers also find that there are no achievement disadvantages for English speakers who are educated in two-way programs" (Gandara & Contreras, 2009, p. 324).

Valdés (1997), however, questioned who actually benefitted from using language as a resource. She pointed that the placement of students, 50% of whom were native speakers of English and 50% native speakers of the partner language created new problems of language hierarchy and the potential for exploitation of Spanish dominant students. Valdés (1997) noted that the provisioning of native language role models for all students was one foundational piece of the DL program model. Speakers of the partner language were expected to receive benefits from DL programs equal to the benefits derived by the English dominant students. However, in practice, this was not always the case. She identified two educational leadership perspectives on DL programs that were held by educators: bilingual educators and foreign language educators. The bilingual educator wants to provide high-quality education for both ELs and English dominant students. The foreign language educator, however, sees the DL program as a means for English dominant students to acquire a second language; consequently, the students serving as role models for the partner language are seen as a means to an end. The power dynamics of DL programs are not neutral—ELs may be exploited for their native language resources for the benefit of the English dominant students (Freeman Field, 2010; Gandara & Contreras, 2009; Nieto, 2009; Schwinge, 2010). Hence, Valdés (1997) argued that educators who were unaware of broader sociopolitical implications of the classroom composition risked causing harm to ELs or Spanish dominant students.

# Methodology

This research used the structure and protocols of a case study. This case study method enabled the researcher to explore organizational practices with a focus on the current reality of the participants (Yin, 2009). Merriam (2009) wrote that the case study method was appropriate in the field of education as it "has proven particularly useful for studying educational innovations, evaluating programs, and informing policy" (p. 51). Because the DL program was examined across the school levels in a single district, the systems and practices of an effective DL program and how they connect with 21<sup>st</sup> century skills were examined at the macro, meso, and micro levels. Through qualitative inquiry in the mode of a case study, exploration of the three schools was intended to reveal "themes, patterns, understandings, and insights" (Patton, 2001, p. 5) of the DL program practices to inform future researchers, policy makers, and educators.

To answer the two research questions, the systems and practices of a DL program were studied across school levels in a single district. Pseudonyms were assigned to the district and the schools to assure confidentiality. The Adelante Unified School District (AUSD) in southern California was chosen along with three schools within the District—Comienzo Elementary School, Proximo Middle School (MS), and Adelante High School (HS). The schools satisfied the study's selection criteria which included the following: (a) the DL program was offered kindergarten through twelfth grade, (b) the elementary school employed a 90:10 instructional model, (c) the secondary schools used a departmental model, (d) Spanish and English were the languages offered, and (e) school or district recognition of increasing student opportunities for ELs and low-income students by the California Department of Education.

This study employed various qualitative research methods, namely, document review, focus groups, and interviews to collect data. The reviewed documents included school-wide enrollment data, state assessment data, DL staff lists, DL program parent brochures, the Chicano studies syllabus, and the Chicano literature syllabus, and related program materials provided by the teachers. Three focus groups were conducted. One focus group included five Comienzo Elementary School teachers. A second focus group was held with five parents of students enrolled in the DL program at either Proximo MS or Adelante HS. The principal at each school was interviewed in addition to two DL program graduates, two DL middle school teachers, and two DL high school teachers. Transcriptions of the interviews and focus groups were coded and organized into themes under each research question. Each coded quote was entered into an Excel spreadsheet and with identifying information and the location of the quote.

#### Limitations

Two areas were identified as limitations of the study: generalizability and factors during data collection. The nature of case study research limits the generalizability and factors during data collection as well as the generalizability of the findings (Yin, 2009). Additionally, the specificity of the composition of the district had a low income predominantly Hispanic population, with a large population of ELs that could limit application to other settings. Areas in the country that do not have enough ELs or a large group of students who speak the partner language may not have the option of implementing a DL program.

Apart from generalizability, other limitations include unknown factors during data collection. When conducting focus groups, there may have been limitations with unknown affects upon each participant based on the responses from others or being in a group setting (Merriam, 2009; Patton, 2001).

### Findings

In relation to the research questions, six themes were identified: belief, established goals, development of community, leadership, structures for collaboration, and systems that advanced 21<sup>st</sup> century skills. Once the themes emerged, they were categorized as either a DL program systems or a practice of DL teachers and leaders. Three themes were relevant to Research Question One: systems that advance 21<sup>st</sup> century skills, established goals, and structures for collaboration. Leadership, development of community, and belief were three themes identified germane to Research Question Two. Table 1 shows the organization of the themes under Research Questions One or Two, the number of quotes attributed to each theme, and the percent of quotes compared to the overall number of quotes.

	Theme	Number of Quotes	Percent of Overall Quotes
Research Question One	Systems that Advance 21st Century Skills	316	36%
	Established Goals	105	12%
	Structures for Collaboration	92	11%
Research Question Two	Leadership	202	23%
	Development of Community	110	13%
	Belief	51	6%

Table 1

Data Themes with Quote Statistics

# Research Question One: What are the key systems of a K-12 Dual Language program that were pivotal in the development of 21<sup>st</sup> century skills?

Three themes germane to Research Question One were classified as: systems that advanced  $21^{st}$  century skills, established goals, and structures for collaboration. Since this case study explored how the skills developed in the DL program aligned with the  $21^{st}$  century skills identified in the *P21 Framework*, the data were organized to show the connection between the DL program systems to the four *P21 Framework* student outcomes sections. Additionally, support of the  $21^{st}$  century skills through the practices of the teachers and leaders was discussed.

**Systems that advanced 21<sup>st</sup> century learning.** The DL program developed 21<sup>st</sup> century skills and was distinguished from other school reform systems in several ways. First, the DL program taught academic skills while students learned two languages. The focus of DL instruction is on bilingual communication through collaboration which are skills vitally important for success in the 21<sup>st</sup> century workplace. Secondly, students gained cultural understanding which increased their understanding of how to think globally. Thinking globally increased DL students' cultural capital and increased the likelihood for success in a globally connected world. In a DL classroom, 21<sup>st</sup> century skills were developed in a culturally relevant and linguistically relevant environment.

*Life and career skills.* Life and career skills listed in the P21 framework involve more than content knowledge. Working in an environment of diversity with open-mindedness was a targeted skill. Working effectively in diverse teams was identified as an ongoing practice of the DL program. The diversity of the classroom was part of the DL structure at the elementary level in that half of the class included ELs, and half of the students were English dominant (Lindholm-Leary, 2001). The students served as language role models for each other, and teachers accessed their knowledge of different words from various Spanish speaking countries to enrich the conversation. One of the graduates who was interviewed for this study discussed that DL students were comfortable with others having differing ideas. Parents mentioned that their children exhibited flexibility in thought and were able to adapt to different situations easily. The abilities to practice flexible and adaptable thinking are skills needed in the 21<sup>st</sup> century workplace.

Student leadership, mutual accountability, and self-directed learning were additional abilities in the life and skills category. This finding aligns with what Darling-Hammond (2002) discussed as interactive teaching and classroom environments promoting a "sense of community and teamwork" (p. 33). That students' managed their time well was mentioned by a parent as a result of being in the DL program. The parents attributed time management skills to the child having to organize his or her thinking and his or her work in two languages. Producing leaders was something the parents said resulted from being in the DL program. At the high school level, development of leadership skills was explicit as a response to the content in the Chicano studies and Chicano literature classes. Several parents mentioned that their children, who were normally shy, felt comfortable running for a student government office because of the encouragement and relationship with their teachers and peers. Teachers and the graduates commented that students felt a responsibility towards one another. This responsibility took the form of healthy competition and pushing each other to achieve. This sense of connection was also found among parents, teachers, and administration.

*Learning and innovation skills.* The learning and innovation skills included the Four Cs: communication, collaboration, creativity, and critical thinking. Communication in two languages was one of the established goals discussed as part of the DL program. Verbal communication in two languages was identified as being a long-standing examined skill in the DL program. Additionally, proficiency in communicating verbally in Spanish and English was part of the exam for continuing at the secondary level. The parents, teachers, and the elementary school principal discussed the established practice of student presentations in the DL classrooms. Frequent student presentations developed confidence as observed by parents as well as the school staff participants. High levels of academic language to enhance the communication skills. Darling-Hammond (2014) discussed the development of metacognition and questioning through application of rigorous content. Teachers expected students to use academic vocabulary during their presentations which provided an opportunity for the authentic application of the vocabulary.

Collaboration was understood as a powerful structure used in the DL classroom to provide opportunities for students to interact using two languages and apply learned content. Teachers and principals acknowledged collaborative structures took different forms; however, collaboration has been an important taught 21<sup>st</sup> century skill. Suárez-Orozco and Suárez-Orozco (2009) discussed speaking multiple languages and cultural understanding as a needed skill in the 21<sup>st</sup> century.

Critical thinking and creativity were both mentioned in the data collection. The elementary school teachers said that the students exhibited creativity and flexibility in their thinking because they frequently tried reaching a solution in different ways. Several parents remarked directly that their children think differently because using a different language allowed more avenues for self-expression. Parents commented that the use of two languages was an advantage because students were able to see the information from another point of view. The rigor of thinking in two languages also improved problem-solving skills. Parents and teachers also noted the DL students' increased executive function (Miyake et al., 2000).

Overall, the DL program structures and practices were shown to develop 21<sup>st</sup> century skills as outlined by the *P21 Framework*. The only exception was the use of media. This analysis demonstrated that the DL program is a viable program for schools seeking an innovative way to implement the CCSS and support the development of 21<sup>st</sup> century skills.

**Established goals.** Frequent examination of long-term goals entails three components: establishing long-term goals; identifying benchmarks for reaching the identified goals; and implementing systems for dissemination and evaluation of the goals (Banathy, 1991; Goldsmith, 2003; Kluger & Van Dijk, 2010). The continuity of the goals and program quality was a common focus across schools. Additionally, long-term goals created a vision for a larger, shared aim beyond the classroom door.

The coding of the data led to identification of four goals which were (a) student proficiency in Spanish and English, (b) passing the Advanced Placement (AP) Spanish language test in tenth grade, (c) integrating cultural elements during instruction, and (d) preparing students with skills for the future. There were, however, different emphases depending on the grade level. The AP Spanish Language examination was not a focus for the elementary staff participants unlike the participants in the secondary level. At the elementary level, use of Spanish and English academic language and students' interest in language were discussed as goals for student proficiency in Spanish and English, but not in relation to the AP Spanish Language examination. The elementary school staff did not mention that the final program benchmark was receiving the DL Program Seal on students' diplomas.

The graduates discussed the Seal of Biliteracy as a prestigious result of the AP Spanish Language examination, but they did not discuss the DL Program Seal. Passing the AP Spanish Language examination was seen as a way of supporting college readiness. The graduates discussed that passing the AP Spanish Language examination was a significant advantage when they entered college. Inclusion of taking an AP Spanish Language examination communicated to students that they already had a foot in the door for college. Biliteracy was a goal expressed by each teacher for their grade level as well as a long-term DL program goal. In addition, all participants were well aware of biliteracy as a goal and valued efforts to achieve that goal. The secondary teachers, secondary principals, and some parents focused on passing the AP Spanish Language examination in tenth grade as a measure for bilingualism.

The district Seal of Biliteracy was a valued benchmark for the graduates. The Seal was awarded to DL students when they maintained a 3.0 grade point average in English language arts, passed the AP Spanish Language examination with a three or higher, and passed the State standardized assessment in eleventh grade. The middle school and high school teachers collaborated to ensure that their instruction supported student preparedness for the AP Spanish Language examination as part of receiving the Seal of Biliteracy.

Global awareness was listed as a skill under 21<sup>st</sup> century themes. Respect for other cultures in instruction was an expectation in the DL classroom. The idea of including cultural understanding in the classroom was central in the discussion regarding why parents chose the program, why teachers had a passion for teaching in two languages, and why principals and the district administrators continued to set up structures to support the DL program. In practice, the teachers and principals discussed teaching culture more in broad terms. The parents discussed the cross-cultural skills as understanding of their own culture or the culture of their ancestors. It was clear that sustaining culture was a key element of the DL program.

**Structures for collaboration**. Structures for collaboration were implemented at the macro, meso, and micro levels. At the macro level, the district office leaders coordinated frequent collaboration meetings in which student data, instructional materials, and DL program goals were examined. Frequent communication and interaction between the district leaders and the school staff conveyed the importance ensuring that the actions of teachers and principals connected with district-wide DL program goals for student achievement. The district leaders harnessed the DL program's professional community to build relationships between teachers, schools, and the district. Various teams were facilitated by the district leaders to "support learning across the schools as well as within schools" (DuFour & Fullan, 2013, p. 67). Regular meetings were scheduled for DL principals and teachers across grade levels. This time for collaboration was similar to DuFour and Fullan's (2013) discussion of how principals working in purposeful teams "to help one another identify and solve problems and promote the success of all the schools in the district" (p. 67) led to positive results.

Teachers and principals reported that when there were concerns about student performance in the DL program, time would be allocated for teachers to examine the situation using student data and to work together with the guidance of district leaders to improve the program. One example of a significant system that was developed through this process was the application process for continuing in the DL program at the secondary level. The teachers were concerned that the students who were continuing with the DL program were not prepared for the rigor at the secondary level. The application process was developed to ensure DL students were on the right track for college. In the district, the application process was first implemented for students continuing from elementary schools to the middle schools. The following year, the application process was implemented for students to continue in the DL program from middle school to high school. Teachers continued to meet and discuss the evolution of the exams included in the application process to reflect current teaching and expectations that align with CCSS.

One of the DL program structures that had the potential to inhibit student access and motivation was scheduling. The middle school principal established a "zero period" schedule structure so DL students did not lose access to electives if they remained in the DL program. Another accommodation in scheduling was the provision of summer classes. A parent of a secondary DL student discussed how the counselor suggested that her child take a class at the high school during the summer session so there would be time to take both the DL class and an AP class during the regular school term. These examples of evaluation of the situation in context of supporting the goals for student achievement, allowed the administrators to make changes to the schedules to increase student access. The graduates of the DL program, however, expressed disappointment over the restrictions on their class schedules at the high school level. At the time the graduates were in high school, summer classes were offered only as remediation due to fiscal restrictions, and so, the graduates were unable to open their schedule by taking summer classes. Frequent collaboration in order to evaluate the curriculum and goals was supported formally by the district and school administration as well as informally by the teachers. District leaders coordinated study sessions for the DL staff members from all grade levels to meet. The multigrade level meetings supported continuity of the goals as well as problem solving discussions. The district leaders also coordinated meetings among the principals to coordinate individual school and district-wide activities.

The district leaders also coordinated evaluation of curriculum by teachers at the meso level. Brooks and Kensler (2011) wrote about the meso level as opportunities created within the school for collaboration on issues promoting equity and access. The curricular meetings included a smaller group of teachers who came together to discuss and plan the time-sequence for instruction. Through employing teacher leadership to make the curricular choices, the decisions were kept close to the classroom (Darling-Hammond, 2002).

Ongoing formal school level meetings included meetings with the general teaching staff and with DL teachers. These school site meetings were also based on the established goals for student achievement and the instructional practices. Meeting with teachers from their grade level or department supported the commonality of instructional strategies and understanding of the standards between DL instruction and English only instruction at the secondary level. The middle school principal discussed the importance of all teachers feeling connected to the DL program's goals. A high school teacher noted that planning instruction as part of the DL program was different because of the long-term goals. The goals focused beyond the grade level to graduating students who are bilingual, biliterate, and culturally diverse. Furthermore, DL teachers understood they were accountable for the State-mandated requirements in addition to the DL program goals. At the high school, both departmental and DL teacher meetings were essential in creating a shared vision. It was noted that the high school structure of teaching a single subject at the high school can make narrow the vision for instruction. Darling-Hammond (2002) noted that time for collaboration "to revisit the school's vision and goals, develop[s] a collective perspective of teaching practice, and create[s] a stronger school culture" (p. 43).

# Research Question Two: What are the significant ways systems are being practiced by educational leaders and teachers at various levels to promote 21<sup>st</sup> century learning in a Dual Language program?

Three themes were also identified pertaining to Research Question Two: distributed leadership, development of community, and shared beliefs.

**Importance of distributed leadership.** In the current climate of educational reform, distributed leadership is a useful practice for effectively implementing and sustaining change. Scholars, such as Fullan (2001), Lambert (2002, 2005), and Spillane et al. (2001), have written about distributed leadership as a useful structure for implementing tenable school reform. Distributed leadership became apparent as a theme when the coding analysis revealed that it was a topic about which all the participants spoke. The participants discussed the importance of leadership by teachers and administrators influencing instruction and in building effective DL structures.

Teachers had a personal interest in the success of the program and principals noted that teachers held each other accountable. All the participants acknowledged that a specialized program was accompanied by additional responsibilities. At the micro, or individual level, instructional leadership was demonstrated when teachers assumed the responsibility to meet with parents, to decide on culturally-relevant activities, and to make choices about instruction. Valenzuela (1999) wrote,

While relationships with teachers exert a tremendous impact on the kinds of schooling orientations that develop in school, the social capital embedded in youths' networks also plays a clear, productive role. Positive relations with teachers and among students make schooling worthwhile and manageable. In so doing, the potential for higher academic achievement increases. (p. 30)

The increase in the students' social capital and academic achievement discussed by Valenzuela (1999) was evident in the AUSD DL programs because of the reciprocal relationship among teachers, parents, and students.

When the teachers at Comienzo Elementary School were faced with the fact that their DL program would close because of declining enrollment, they assumed the role of community leaders. Teachers informed parents of the requirements to preserve the program at Comienzo School. Teachers also harnessed the power of community voice to increase enrollment. Their actions had long-term-results in that the parents and teachers continue to connect to ensure a stable program that remains an option for the Comienzo School community.

Distributed leadership practiced within the DL program empowered the practitioners to evaluate and improve the program within the system established by the district and school leaders. The work of implementing the DL program goals was viewed as everybody's shared responsibility as well as a shared passion among the DL community members. Shared responsibility resulted in dedication to the quality of the program and the students' academic success.

**Development of community**. At the micro level, teachers, parents, students, and administrators created community through the individual actions that were apart from the standard or typical interactions at a school. The actions at the micro level were evident in the connections discussed by all the participants. Graduates, parents, and teachers said the DL program felt like a family. The graduates discussed how they challenged each other to excel the way siblings might challenge each other. Parents spoke of joining the DL program because of the recommendation of other parents. Parents also valued feeling comfortable to call other parents or the teachers for support.

Meeting with the parents to annually review the goals was discussed as a practice at AUSD at all levels of schools. The parents were initially informed of the program through formal meetings or from school community members. It was noted by the teachers and secondary principals that the parents knew the program goals and expectations early in their involvement of the program. The questions at the DL secondary parent meetings focused more on the types of classes and access to electives.

The service-learning project at the high school was a specialized activity which connected the DL program seniors to the community as part of their Chicano literature class. The topics chosen by the students for their service-learning projects helped advance civic and health literacies. Some of the service-learning projects were multicultural fairs at the middle schools and at the elementary schools, health fairs at elementary schools, the production of Spanish plays, and activities for students to support their understanding of their contribution to the community.

The projects began with students identifying a problem in the community. The DL students then researched the issue and created a plan to address the issue in the community. They implemented their plan and then presented the results in class. A reflection was included at the end of their service-learning presentation. The service-learning project was discussed by the Chicano literature teacher as a culmination of all the instruction the students had received in the DL program. A graduate commented that the experience of the service-learning project supported her understanding of how to make professional connections in her current job. The teacher of this class stated that the goals of this project were to build student agency, improve networking skills, and hone other soft skills needed to be successful in college. This aligns with the call from Suárez-Orozco and Suárez-Orozco (2009) for a 21<sup>st</sup> century citizenry who understand the culture of the community and increase the student's cultural capital.

**Shared beliefs**. Parents in the DL program connected with each other because they shared beliefs in the importance of common goals for their children, and they had similar experiences as participants in the DL program. Because of the cultural component, parent collaboration with the teacher and student was a natural element. Language and culture is personal and value laden. The teachers and leaders in AUSD strived to communicate the value of culture and language to parents and students through the manner in which the DL program was implemented. The parents expressed that they chose the program because they wanted their child to have a connection to culture and language. The DL program's cultural instruction went beyond basic knowledge to the more personal skills of cultivating talent, promoting individual passion, and valuing culture. Building upon the interests and talents to enhance the educational experience were elements discussed by the participants.

Parents spoke of the cultural experiences included in the DL program as a significant reason for choosing the DL program. The cultural aspect of the DL program was incorporated by the teachers individually in their classes and district outlined activities. At the elementary level, the forms of cultural activities were not as clearly defined as the secondary level. The parents commented that the inclusion of cultural elements in instruction depended on the decisions of the teachers and principals.

The long-term goals in place at AUSD were the guideposts for developing instruction in the classrooms, implementing programs at the school sites, and evaluating district-wide systems. The goals were shared and believed to be important by the school staff members and parents which was the foundation for creating a culture supportive of student achievement.

The DL program provided students the opportunity to learn two languages as an option for students at an early age. Learning a second language connected with the core subject area of world languages. At the studied schools, the DL program option was publicized to parents by principals, teachers, and other parents. The parents discussed that the structure of teaching two languages through content made language an important theme for students. Parents and teachers also noted that language was something students thought about; the subject had become important to them. The graduates discussed how being bilingual helped them connect with others who spoke Spanish as well as to their family members.

### Conclusion

This study identified the systems and key practices of a DL program that support student preparation as 21<sup>st</sup> century learners and how they were implemented by teachers and school leaders. The data supported that the DL program is an important educational system to be considered by school districts that have the appropriate student population. The DL program is an additive program which provides a cultural and linguistically relevant context for teaching and learning the 21<sup>st</sup> century skills. Garcia and Baetens Beardsmore (2009) stressed,

Bilingualism must be accepted as an all-terrain vehicle, adapting to the ridges and the craters of communication that encompass technology enriched interactions in the global sphere and in very local exchanges. Bilingual education could be a mechanism to develop this communicative capacity for the twenty-first century. (p. 387)

Studying the DL program across the school levels provided an important perspective on the extent of the collaboration and distributed leadership that are needed to effectively implement such a large program. The DL graduates gave insights on how the structures affected their connection with their school community as well as the DL community. The dedication of the parents, teachers, and principals resulted in a community built upon the shared goal of student success. It became apparent that the long-term goal of achieving the Seal of Biliteracy had several impacts. First it was a well-defined goal for students, teachers, and parents. Additionally, passing the AP Spanish Language examination built a mindset for college attendance because the students had already earned college credit.

This case study explored the systems that supported the DL program and found these systems to be dynamic and continuously evaluated and modified by the school staff in order to meet the needs of the students. The staff members' practices were frequently examined and aligned to the DL goals among school staff members as well as across school levels. Frequent collaboration resulted in informal expectations of increased rigor and teacher leadership. Ideas now identified as 21<sup>st</sup> century skills were identified as skills already embedded as part of the DL program. Finally, the work of education is a dynamic process built upon the passion of the people who are part of the school community with the goal of student success. DL programs that are implemented with sustained, distributed leadership and collaboration can serve as a primary influence in students' development of 21<sup>st</sup> century skills.

# References

- Alanis, I., & Rodriguez, M. A. (2008). Sustaining a dual language immersion program: Features of success. *Journal of Latinos & Education*, 7(4), 305–319.
- Banathy, B. H. (1991). *Systems design of education: A journey to create the future*. Englewood Cliffs, N.J: Educational Technology Publications.
- Bialystok, E. (1991). Language processing in bilingual children. Cambridge University Press.
- Bialystok, E. (2001). *Bilingualism in development: Language, literacy and cognition*. Port Chester, NY, USA: Cambridge University Press. Retrieved from http://site.ebrary.com/lib/alltitles/docDetail.action?docID=5006349
- Bolman, L. G., & Deal, T. E. (2008). *Reframing organizations: Artistry, choice and leadership*. Jossey-Bass.
- Brooks, J. S., & Kensler, L. A. W. (2011). Distributed leadership and democratic community. In F. W. English (Ed.), *The SAGE Handbook of Educational Leadership: Advances in Theory, Research, and Practice* (pp. 55–66). Thousand Oaks, CA: SAGE Publications, Inc.
- Cloud, N., Genesee, F., & Hamayan, E. V. (2000). *Dual language instruction: A handbook for enriched education*. Boston, MA: Heinle & Heinle.
- Collier, V. P., & Thomas, W. P. (2004). The astounding effectiveness of dual language education for all. *NABE Journal of Research and Practice*, 2(1), 1–20.
- Common Core State Standards Initiative. (2014). Development Process | Common Core State Standards Initiative. Retrieved from http://www.corestandards.org/about-thestandards/development-process/
- Darling-Hammond, L. (2002). 10 features of good small schools-redesigning high schools: What matters, what works. *School Redesign Network, Stanford University*. Retrieved from https://edpolicy.stanford.edu/sites/default/files/10-features-good-small-schools-redesigning-high-schools-what-matters-and-what-works\_0.pdf
- Darling-Hammond, L. (2014). What can PISA tell us about U.S. education policy? *New England Journal of Public Policy*, 26(1), 1–14.
- Darling-Hammond, L., LaPointe, M., & Meyerson, D. (2009). Preparing principals for a changing world: Lessons from effective school leadership programs. Hoboken, NJ, USA: Jossey-Bass. Retrieved from http://site.ebrary.com/lib/alltitles/docDetail.action?docID=10350132

- Duffy, F. M. (2010). Dream! create! sustain!: Mastering the art and science of transforming school systems. Rowman & Littlefield Publishers.
- DuFour, R., & Fullan, M. (2013). Cultures built to last: Systemic PLCs at work. Bloomington, IN, USA: Solution Tree Press. Retrieved from http://site.ebrary.com/lib/alltitles/docDetail.action?docID=10743964
- Estrada, V. L., Gómez, L., & Ruiz-Escalante, J. A. (2009). Let's make dual language the norm. Educational Leadership, *66*(7), 54–58.
- Foy, J. G., & Mann, V. A. (2013). Bilingual children show advantages in nonverbal auditory executive function task. *International Journal of Bilingualism*. http://doi.org/10.1177/1367006912472263
- Freeman Field, R. (2010). Identity, community and power in bilingual education. In J. Cummins & N. Hornberger (Eds.), *Bilingual Education*. Springer Verlag.
- Freeman, R. (1994). Language planning and identity planning: An emergent understanding. *Working Papers in Educational Linguistics*, *10*(1), 1–20.
- Freeman, Y. S., Freeman, D. E., & Mercuri, S. (2005). *Dual language essentials for teachers and administrators*. Portsmouth, NH: Heinemann.
- Fullan, M. (2001). Leading in a culture of change. San Francisco, CA: Jossey-Bass.
- Fullan, M., Langworthy, M., & Barber, M. (2014). *A rich seam*. Retrieved from http://www.newpedagogies.info/wp-content/uploads/2014/01/A\_Rich\_Seam.pdf
- Gandara, P. C., & Contreras, F. (2009). *The Latino education crisis: The consequences of failed social policies*. Cambridge, MA: Harvard University Press.
- Gandara, P. C., & Gomez, M. C. (2008). Language policy in education. In G. Sykes, B.
  Schneider, & D. N. Plank (Eds.), *Handbook of Education Policy Research* (pp. 581–595).
  Routledge. Retrieved from http://www.routledge.com/books/details/9780415989916/
- García, O., & Baetens Beardsmore, H. (2009). *Bilingual education in the 21st century: A global perspective*. Malden, MA; Oxford: Wiley-Blackwell Pub.
- Garcia, P. A. (2011). A delicate balance: Continuing immersion in U.S. middle and high schools. *Regents of the University of Minnesota*. Retrieved from http://www.researchgate.net/publication/234586023\_Integrating\_Language\_and\_Content \_in\_Immersion\_Classrooms\_Research\_Perspectives
- Goldsmith, M. (2003, Fall). Try Feedforward instead of feedback. *Journal for Quality & Participation*, pp. 38–40.

- Hargreaves, A. & Fullan, M. (2013). The power of professional capital. *Learning forward*, Vol. 34. No. 3. Retrieved from http://www.michaelfullan.ca/wp-content/uploads/2013/08/JSD-Power-of-Professional-Capital.pdf
- Heinrichs, C.R. (2015) *Exploring the influence of 21<sup>st</sup> century skills in a dual language program: a case study* (Doctoral dissertation). Retrieved from California State Polytechnic University Library (http://hdl.handle.net/10211.3/157290).
- Kluger, A. N., & Van Dijk, D. (2010). Feedback, the various tasks of the doctor, and the feedforward alternative. *Medical Education*, 44(12), 1166–1174. http://doi.org/10.1111/j.1365-2923.2010.03849.x

Lambert, L. (2002). A framework for shared leadership. Educational Leadership, 59(8), 37-40.

- Lambert, L. (2005). Leadership for lasting reform. *Educational Leadership*, 62(5), 62–65. Retrieved from http://proxy.library.cpp.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true &AuthType=ip,uid&db=aph&AN=15969326&site=ehost-live&scope=site
- Lindholm-Leary, K. J. (2001). Dual language education. Multilingual Matters.
- Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. San Francisco: Jossey-Bass.
- Miyake, A., Friedman, N. P., Emerson, M. J., Witzki, A. H., Howerter, A., & Wager, T. D. (2000). The unity and diversity of executive functions and their contributions to complex "frontal lobe" tasks: a latent variable analysis. *Cognitive Psychology*, 41(1), 49–100. http://doi.org/10.1006/cogp.1999.0734
- Nieto, S. (2009). *The light in their eyes: Creating multicultural learning communities*. New York: Teachers College Press.
- Olsen, L. (2010). Reparable harm; Fulfilling the unkept promise of educational opportunity for California's long term English learners. Long Beach, CA: Californians Together.
- Patton, M. Q. (2001). *Qualitative research & evaluation methods*. Thousand Oaks, CA: SAGE Publications, Inc.
- Partnership for 21st Century Skills. (2006a). Our history the partnership for 21st century skills. Retrieved from http://www.p21.org/about-us/our-history
- Partnership for 21st Century Skills. (2011a). P21 common core toolkit: A guide to aligning the common core state standards with the framework for 21st century skills. The Partnership for 21st Century Skills.

- Ray, J. M. (2008). Building the bridge as you walk on it: Didactic behaviors of elementary teachers in a dual language program. *Teaching and Teacher Education*, 24(6), 1658– 1671. http://doi.org/10.1016/j.tate.2008.01.007
- Schwinge, D. (2010). Conceptualizing biliteracy within bilingual programs. In J. Cummins & N. Hornberger (Eds.), *Bilingual Education*. (pp. 51–64). Springer Verlag.
- Skutnabb-Kangas, T., & McCarty, T. L. (2010). Key concepts in bilingual education: Ideological, historical, epistemological, and empirical foundations. In J. Cummins & N. Hornberger (Eds.), *Bilingual Education*. (pp. 3–17). Springer Verlag.
- Spillane, J. P., Halverson, R., & Diamond, J. B. (2001). Investigating school leadership practice: A distributed perspective. *Educational Researcher*, *30*(3), 23–28. http://doi.org/10.3102/0013189X030003023
- Stocco, A., Yamasaki, B., Natalenko, R., & Prat, C. S. (2012). Bilingual brain training: A neurobiological framework of how bilingual experience improves executive function. *International Journal of Bilingualism*. http://doi.org/10.1177/1367006912456617
- Suárez-Orozco, C., & Suárez-Orozco, M. M. (2009). Educating Latino immigrant students in the twenty-first century: Principles for the Obama administration. *Harvard Educational Review*, 79(2), 327–340.
- Thomas, W. P., & Collier, V. (1997a). School effectiveness for language minority students. NCBE Resource Collection Series, No. 9. Retrieved from http://eric.ed.gov/?id=ED436087
- Thomas, W. P., & Collier, V. P. (1997b). Two languages are better than one. *Educational Leadership*, 55(4), 23.
- Thomas, W. P., & Collier, V. P. (2002). A national study of school effectiveness for language minority students' long-term academic achievement. Retrieved from http://eric.ed.gov/?id=ED475048
- Thomas, W. P., & Collier, V. P. (2003). The multiple benefits of dual language. *Educational Leadership*, *61*(2), 61–64.
- Valdés, G. (1997). Dual-language immersion programs: A cautionary note concerning the education of language-minority students. *Harvard Educational Review*, 67(3), 391–430. http://doi.org/10.17763/haer.67.3.n5q175qp86120948
- Valenzuela, A. (1999). Subtractive schooling: U.S.-Mexican youth and the politics of caring. Albany: State University of New York Press.
- Wagner, J. A., & Hollenbeck, J. R. (2009). Organizational behavior: Securing competitive advantage. Routledge.

Yin, R. K. (2009). *Case study research: design and methods*. Los Angeles, CA: Sage Publications, Inc.