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The Value of Meaning-Making and Cultural Knowledge for Teachers Working in Culturally and Linguistically Diverse Contexts

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Abstract: The tapestry of classrooms today is transforming into a mosaic of colors, languages, and backgrounds. As the population of culturally and linguistically diverse students continues to rise, a deeper understanding of how teachers construct meaning and understand their internal and relational experiences when working with these students has become an important area to examine. This study included in-depth interviews with ten public school teachers in the San Diego area, which assessed the teachers' meaning-making systems and their cultural competence. The framework of constructive developmental theory (Kegan, 1982, 1994) was drawn upon to assess how teachers' make sense of their experiences, and the framework of cultural intelligence (Earley & Ang, 2003) was used to determine their cultural competence. Although both frameworks provided some insight into this phenomenon, their limitations far exceeded their utility in terms of understanding the complex ways in which teachers understand and approach their work with culturally and linguistically diverse students. Additional frameworks for understanding teacher -student interactions are considered.

Keywords: Culturally and Linguistically Diverse Learners, English Language Learners, culture, negotiating meaning, teacher development

INTRODUCTION

In 2009, Latinos, Asians, and African Americans accounted for roughly 70% of the student population in California (California Department of Education, Educational Demographics Unit, 2008-2009). As the Culturally and Linguistically Diverse (CLD) student population continues to rise, significant attention has been paid to the evolving roles of teachers as they work to address the achievement gap and eliminate educational disparities between students of diverse backgrounds and their English-speaking peers (Banks et al., 2005; Darling-Hammond, 1997). Not only do they need to pay heed to the institutional and academic demands of scaffolding instruction for all learners to meet state and national standards, but also the interpersonal and intrapersonal demands of building relationships with students from a variety of backgrounds through self-knowledge and self-reflection.

There are a growing number of teacher training materials for public school teachers explicating best practices on teaching CLD students mainstreamed into their classrooms. Not only do these materials expect teachers to teach their specialized subject areas, but they also expect that teachers kow how to address language issues arising from linguistic diversity. In addition, authors also make an argument for teachers to expand their roles to include that of being 'intercultural educators' (See Diaz-Rico & Weed, 2006, Echevarria & Graves, 2007, Gonzalez *et al.*, 2006, Balderrama & Diaz-Rico, 2006, and Ariza, 2006).

Teachers have been encouraged to become *cultural mediators* (Echevarria & Graves, 2007) and *cultural brokers* who understand different cultural systems, have the ability to interpret symbols from one frame of reference to another, mediate cultural incompatibilities, and know how to establish connections across cultures (Gay, 1993). For example, Quintanar-Sarellana (1997) points out that *culturally aware* teachers are able to bridge their students' cultures into the school and are more likely to try out different strategies and methods, such as engaging in self and professional development to better enable them to

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connect with their CLD students and support them academically. The danger of teachers who are *culturally unaware* on the other hand, is that they may knowingly or unknowingly reject their students' cultures, which may hamper the efforts to close the achievement gap (Schofield, 2003). Although criticism exists on the relative importance of cultural knowledge on the educational achievement of students, Goldenberg, Rueda, & August (2008) believe that educators should possess "sociocultural awareness" as a lens to guide their teaching of literacy, numeracy, and critical thinking amongst other important educational goals.

As such, it has become increasingly important to understand what competencies are necessary to fulfill this role in light of the fact that teachers leaving the profession have attributed one of their reasons for leaving to their sense of inadequacy in their work with CLD students (Futernick, 2007). Although this sense of inadequacy can be attributed to a variety of factors such as inadequate administrative support measures (Gandara, Maxwell-Jolly, & Driscoll, 2005), one area that may provide insight into this unfortunate phenomenon is the ways in which teachers make sense of their work with those who have different backgrounds than their own, and how their cultural competence might support this work.

GUIDING FRAMEWORKS

Two frameworks, constructive-developmental theory and the theory of cultural intelligence, were drawn upon to assist in understanding how teachers conceptualize and approach their work with their CLD students. Kegan (1994) and King & Baxter Magolda (2005), assert that there is a connection between how people conceptualize their experiences in relation to the other and how they might, as a result, approach their work with diversity. Therefore, Kegan's (1982, 1994) constructive developmental theory was used as a framework to understand how teachers construct meaning from their experiences, and if this capacity has a relationship to how they understand their work with their CLD students. Because Kegan's (1982) theory does not address cultural competence directly, the framework of cultural intelligence developed by Earley and Ang (2003) was adapted and applied to teachers to ascertain their understanding of culture and how this knowledge might inform their approach in relating to and working with their CLD students.

Constructive-Developmental Framework. Kegan's (1982, 1994) constructive developmental theory is "constructive in the sense that it deals with a person's constructions, or interpretations of an experience. It is developmental in the sense that it is concerned with how those constructions, and interpretations of an experience grow more complex over time" (McCauley, Drath, Palus, O'Conner, & Baker, 2006, p. 635). This is also known as the subject-object theory in the sense that it considers what the person is embedded in and cannot reflect upon, therefore subject to, and what the person can reflect upon as something that is outside herself as object. This system that the person is currently subject to, or making sense of their experiences from, is considered to be their Meaning Making System (MMS).

Based on previous studies utilizing this framework, it was found that one-half to two-thirds of the adult population reside between the *interpersonal* and *institutional* MMS (See Goodman, 1983, Jacobs, 1984; Alvarez, 1985; Lahey, 1986; Dixon, 1986; Allison, 1988; Hasegawa, 2003; King & Baxter Magolda, 2005). This study also found one teacher transitioning into the *institutional* MMS, therefore, only these three MMS will be described briefly below.

In the *interpersonal* MMS the person identifies or is subject to shared values and feelings co-constructed through interpersonal relationships and brings inside the others' perspectives as one's own. This internalized other could include (friends, ideologies, beliefs, spouse). If this theory is applied to a teacher, she would not be able to see herself as separate from her beliefs and values she was socialized in as part of her upbringing, and may hence, project these unknowingly and with the best of intentions onto her students. A teacher using this system may have particular difficulty if she cannot connect to her students and they cannot reach some level of mutual understanding; a teacher utilizing this MMS would need and search for approval and define her self-worth by what others may say. In other words, teachers *subject* to this MMS are dependent on others to guide them through their work and evaluate the worth of their work (Hasegawa, 2003).

In the *institutional* MMS, one can reflect on this identity co-constructed through interpersonal relationships, but is able now to create one's own values, beliefs, and ideals separate from the other. The limitation of this MMS is that these self-constructed principles cannot be reflected on. According to Kegan (1982, 1994), the inability to reflect on oneself and the role one plays in relationships with the other does not allow one to truly learn from the opportunities brought forth by diversity. Kegan (1982, 1994) asserts that minimally a person should be operating from the *institutional* MMS to work effectively with diversity. A teacher operating from this MMS then is able to reflect on her interpersonal relationships and shared values, beliefs, and is now subject to her own self-authored principles (values, beliefs, ideals). She can now take responsibility for her own intrapersonal psychological states.

It is important to note here that a characteristic of the next system, the *inter-individual* MMS, is that this person can now hold ambiguity and is open to various perspectives that may challenge his or her own self-created beliefs, which appears to be the ideal MMS to work most effectively with students from various backgrounds. However, the studies mentioned above have indicated that only about 4% of the adult population can construct meaning from this system, which might make it difficult to further study the implications of this system on how teachers approach their work with their CLD students.

Cultural-Competence Framework. The multidimensional construct of cultural competence, known as Cultural Intelligence (CQ) developed by Earley and Ang (2003) was a second theoretical lens utilized to understand teachers' competence as it relates to their knowledge and interactions with their diverse student populations. The authors define cultural intelligence as "an individual's capability to function effectively in situations characterized by cultural diversity." By function, the authors mean "the ability to grasp, reason, and behave effectively..." (Ang, Van Dyne, Koh, Templer, & Chandrasekar, 2007, p. 337). This construct consists of four sub-components including metacognitive, cognitive, motivational, and behavioral CQ. When these constructs are applied to teachers working with CLD students, metacognitive CQ entails an awareness of one's own assumptions and cultural constructs and the ability to gauge those of their students. Cognitive CQ is the knowledge of the cultural values, norms, and systems of the students' cultures. Motivational CQ is one's willingness to participate and be successful in the intercultural interactions with the students, and lastly, behavioral CQ is the capacity to act appropriately within these cross-cultural interactions so as to not impose one's own cultural behaviors and norms onto the students.

RESEARCH DESIGN METHODOLOGY

Two in-depth interviews with ten teachers from the San Diego area currently working with CLD students were conducted. The first interview, subject-object interview, was based on Kegan's constructive-developmental theory and was used to ascertain how teachers made sense of their experiences (Lahey, Souvaine, Kegan, Goodman, & Felix, 1988). The second interview, the cultural competence interview, was based on Earley & Ang's (2003) Cultural Intelligence Scale and was adapted for this study to elicit a more in-depth understanding of the participant's response to each item in the original Likert-scale design.

Participant Backgrounds

A total of 153 emails went out to teachers in San Diego area requesting for their participation in this study in the spring and summer of 2009. 13 teachers responded to this invitation with completed demographic questionnaires, from which 10 teachers were selected to participate in this study. Given the low response rate, however a maximum variation sampling as possible (Patton, 1990) was attempted.

The teachers' ages ranged from age 24 to 60 (mean age = 36.8), with two teachers in their 20s, five teachers in their 30s, two teachers in their 40s, and one teacher who is 60 years of age. The education level of the participants included eight teachers with Masters degrees, one teacher working towards her master's degree and one teacher working towards her doctorate degree. At the time of this study, three teachers were teaching at an elementary school, two teachers were teaching at a middle school and five teachers were teaching at the high school level. The teachers' teaching experience ranged from 1.5 years to 38

years (mean years teaching = 11.05). All teachers in this study were female. In terms of racial/ethnic backgrounds reported by the teachers, six teachers were Caucasian, two were Hispanic, and two were of mixed race, one being half Italian and half Japanese, and the other, half Hawaiian and half Irish. Four of the teachers identified themselves as being bilingual. Of the four, two of them were Hispanic and two were Caucasian. Six teachers felt that they were only proficient in English, though some of them have taken some level of foreign language classes in either high school or college.

Four of the teachers have a specialization in TESOL (Teaching English to Speakers of Other Languages). The three elementary school teachers had their master's degrees in TESOL, English, and Literacy. Most middle and high school teachers were either trained in English or had training in working with CLD students with the exception of one Math teacher, whose training to teach CLD students was embedded within her credential program since she received hers most recently in 2009. All the teachers taught within their specialization with the exception of Georgina who was teaching reading at the middle school level with a multiple subject credential or credential to teach elementary school. Their current teaching assignments ranged from teaching English learners only in ELD (English Language Development) classes, to teaching mainstreamed students at the elementary grades and in specific subject areas at the middle and high school levels.

Instruments

The subject-object interview instrument

Lahey et al. (1988) in conjunction with Kegan (1982, 1994) developed the Subject-Object Interview instrument, based on Kegan's (1982, 1994) constructive-developmental theory, to reveal a person's meaning-making system. It has been designed "to assess an individual's unselfconscious epistemology" or "principle of meaning-coherence" (Lahey et al., 1988, p. 427). In other words, through the sharing of experiences, the researcher can understand how the participants are making sense of their experiences and the role of themselves and others within these experiences. This instrument has a test-retest reliability (.82), inter-rater agreement (.75 to .90) and construct validity (Lahey et al., 1988, pg. 427). This instrument has been utilized in a wide-range of studies to understand the experiences of parents (Goodman, 1983), adult learners (Dixon, 1986; Popp, 1997), married couples (Jacobs, 1984, Allison, 1988) and college students, and has been further developed, fine-tuned and transformed and used in the field of leadership studies and executive training (Cook-Greuter, 1999, 2004; Anderson, 2006).

The cultural intelligence scale instrument

The cultural intelligence scale (CQS) is an instrument developed by Earley & Ang (2003) to measure a persons' CQ. It utilizes a Likert Scale from 'Strongly Disagree' to 'Strongly Agree'. The instrument was initially developed with fifty-three items for each dimension of CQ with 13-14 statements to reflect each of the four dimensions within the cultural intelligence framework. A panel of six members comprised of three faculty members and three international executives were all selected for their crosscultural expertise. These members rated each of the fifty-three items for clarity, readability, and definition, and based on this assessment, retained forty items in total, with ten items for each dimension. The 40-item scale was then administered to 576 undergraduates in a Business school in Singapore and based on confirmatory factor analysis was narrowed to twenty items with the strongest psychometric properties. Studies that followed showed that this scale had generalizability across samples, across time, across countries, and across methods (self-report and observer-report) (Van Dyne, Ang & Koh, 2008, p. 31). Although this construct has been applied primarily to the international realm of interactions, much of the expectations on intercultural interactions between nations also holds true for teachers working in-house where such intercultural interactions appear at the micro-level in the classrooms.

Procedures

Interview 1: subject-object interview protocol

The following is a summary of the interview process and adaptations that were made for this study (Lahey et al., 1988). For the first interview, ten 5' X 7" cards with the words angry, anxious/nervous, success, strong stand/conviction, sad, moved/touched, lost something, change and important were prepared. The participants were asked to jot down some notes about any recent experiences they had where they felt these emotions. For example, for "angry," the participants were prompted in the following way. "If you were to think back over the last several weeks, even the last couple of months, and you had to think about the time when you felt angry about something (it could be, but it does not have to be related to your CLD students), or times when you felt a sense of outrage or violation are there two or three things that come to mind?" (Lahey et al., 1988, p. 429-433). Because many of the interviewees were unable to come up with experiences involving their CLD students in particular that spoke directly to the emotions, they were allowed to speak of any recent experience evoking the emotion. Because the MMS should apply across contexts, this did not appear to be a problem. Based on the protocol, a maximum of two to three emotions were sufficient to reflect upon during the interview.

Emotions such as "guilt," "success," and "loss," can generate an understanding of what the participant is *subject* to and therefore cannot reflect on, and what the participant is *object* to and therefore can see as separate and can reflect on. A person cannot reflect on the system that they are embedded in. For example, in the interpersonal MMS, they identify so closely with their interpersonal relationships that they cannot separate the ideologies, feelings that are generated through these relationships as separate from their own. The subject then is the teacher's MMS, and through the interview process and probing the researcher could determine what the teacher could not reflect on and therefore is subject to and the object of "guilt" for example, such as whether this guilt is experienced in relation to another person or event. When one is moving to the *interpersonal* system, one can reflect upon as *object* (separate from themselves) his or her own desires, needs, and interests, and to identify with the shared values and feelings coconstructed through interpersonal relationships with others. The inability to separate one's desires, needs, and interests is a characteristic of the MMS system prior to the interpersonal system. In this way, he or she becomes *subject* to thoughts and feelings based on the internalized other's (friend/s, spouse, religious beliefs, ideologies) thoughts, feelings and perspectives. However, these thoughts, feelings, and perspectives based on the internalized other cannot be reflected on. This ability to reflect on the internalized other emerges in the institutional MMS, where the person moves beyond the internalized thoughts, feelings, and perspectives of friends, spouse, religious beliefs, and ideologies, and can create his or her own values, beliefs, ideals, interpersonal relationships and intrapersonal psychological states. The person recognizes that he or she is responsible for his or her thoughts, feelings, and perspectives apart from those of others. This person can take responsibility for what happens both internally and externally, rather than feeling that the experiences are caused by someone or something else. When people make meaning from the inter-individual MMS, they demonstrate the ability to reflect on their self-generated system and are open to change. For further information on the data analysis process, please see Molina (2010).

Interview 2: Cultural competence interview

The cultural competence interview that was used in this study is based on Earley & Ang's (2003) Cultural Intelligence Scale and had been adapted for this study to elicit a more in-depth understanding of the participant's response to each item in the scale. The self-report data on the Likert scale, which is part of the original design, would not provide sufficient understanding of how teachers understood and approached their work with their CLD students. The items were also adapted to understand their cultural intelligence as it relates specifically to their understanding of their students' cultures where applicable, as the original instrument talked about cultures in general rather than specifically to the cultures of their CLD students.

For example, the original item in the Cultural Intelligence Scale states, "I am conscious of the cultural knowledge I use when interacting with people from different cultural backgrounds." The adaptation of this item for the cultural competence interview was as follows: "What are the types of cultural knowledge you draw upon when interacting with your students from different cultural backgrounds. What this type of question did was to also elicit examples on how they approached their work with their CLD students through the probing process.

The limitation again is that what teachers say and actually do may be quite different. However, the intention behind the adaptation of the interview to a qualitative one was to elicit through the probing process concrete examples on what the teachers have actually done or do in response to the four CQ constructs.

FINDINGS

This study revealed the complexity of the teachers' experiences that oftentimes went beyond the proposed theoretical lenses selected for this study. Therefore, only the relevant aspects of the findings from these theoretical lenses that provided insight into how teachers understood and approached their work with their CLD students will be discussed.

Teachers' Meaning-making Systems (MMS)

This section presents the teachers' MMS and the general similarities and trends that characterized each MMS. Some of the lines demarcating each MMS are not clearly defined and this is because three of the teachers were transitioning between systems, and exhibited characteristics of both systems. The following table presents a distribution of the teachers' MMS.

Table 1:	Distribution	of Meaning-	making Syste	ems (MMS)

Participants	MMS #	MMS
Annie	3	Interpersonal
Brenda	3(4)	Interpersonal (Institutional)
Heather	3	Interpersonal
Georgina	3/4	Interpersonal/Institutional
Nikki	3	Interpersonal
Malorie	4	Institutional
Ramona	4	Institutional
Kay	3	Interpersonal
Barbara	4	Institutional
Katherine	4(5)	Institutional/Inter-individual

The teachers in this study ranged primarily between the *interpersonal* and the *institutional* MMS, which is not surprising because Kegan (1982, 1994) and those utilizing the instrumentation based on his subject-object theory found that most adults, roughly three-fourths of the population, reside within these two MMS. However, because this theoretical frame has not been applied to teachers working with CLD students before, it is interesting to note how these characteristics manifested for these teachers.

An analysis of the teachers' MMS across participants revealed some similarities shared between teachers in each MMS. Rather than presenting an analysis of each teachers' MMS individually, a synthesis of similar trends that emerged for teachers operating from the same MMS follows.

Shared characteristics of the teachers operating from the interpersonal MMS

Four teachers, Annie, Heather, Nikki, and Kay, demonstrated a primary use of the *interpersonal* MMS during the interview across two to three contexts. For example, Annie described her recent experiences of feeling successful. On one level, she felt successful because she was hand picked to teach the class, and on another level, she felt successful because the students, who teachers usually had difficulty with in terms of keeping their attention, came to her class everyday, liked what she was doing, and worked hard to pass the class. Her feeling of success in both instances was dependent on external validation from others. First, the validation came from the person in charge of selecting teachers to teach specific courses and second, the students made her feel successful by showing up to class, being interested in her pedagogical practice, and passed the class that summer. In the context of teaching, what was external to her (eg. administrators, students, grades, pass rate) was internalized whereby these external sources were the primary measures through which she evaluated her success.

Shared characteristics of teachers transitioning from the interpersonal to institutional MMS

Two teachers represented this category because they were evolving between the interpersonal and institutional systems at different qualitative representations. They were both embedded within their interpersonal relationships, but were also in different ways able to step out and reflect on these relationships. Although Brenda's transcripts revealed more examples of her being embedded in the *interpersonal* MMS, there was also evidence that she was operating from the (transitional) institutional MMS, where she demonstrated the ability to step back and reflect on her relationship with her students, rather than be embedded in the relationship. In other words, she was able to think about her thinking and thus challenge her assumptions. For instance, she shared a time when she assumed that a student with a scar on his head was involved in a gang based on what she knew about the gangs in the neighborhood. She challenged her assumptions as she worked with him in her class, and learned eventually that her assumptions were wrong. She thought about her assumptions, challenged her assumptions, and was deeply reflective about how her assumptions colored her view of this student. Likewise in another example, she discussed how she did not consider her students' reactions to the Border Patrol agents visiting her classroom to discuss safety issues. As she made this announcement of their arrival, many of the students rushed to make green cards out of pencil and paper as a joke, and she began to realize how her experiences being a Mexican American differs from some of her students who are recent immigrants, where she did not consider the impact that this presentation was going to have on them until she reflected on this experience.

Shared characteristics of teachers operating from the institutional MMS

Three teachers, Malorie, Ramona, and Barbara, utilized the institutional MMS. These teachers showed evidence of self-authored principles that were not dependent on others. They were able to articulate their beliefs and reflect on their roles within relationships which was difficult for teachers using the interpersonal MMS, who were influenced directly by relational others or external sources. This is not to say that relationships were not important to institutional meaningmakers, but they were not afraid to voice their stance for fear of jeopardizing these relationships. They take responsibility for their own feelings and experience as internally generated rather than from external others or sources. For example, Barbara spoke about a student of hers who could not afford the S.A.T. exam, and she knew that the secretary had vouchers for students from lowincome families. She asked her student to go to the office and get this voucher, however, as Barbara passed the office, she noticed that the other secretary was not willing to help her as the secretary who usually kept these vouchers was not available. The student was just about to give up hope when Barbara asked to open the drawers of the secretary with the vouchers and was able to find one for this student. Had she not been there, she said, this student, who was a brilliant student with a lot of potential, would have given up and not bothered to take the exam, and hence, not have the opportunity to go to college. She knew that the secretary was not happy with her decision to take matters into her own hands, but Barbara said she knew that there was a lot more at stake for the student than for her, as the only repercussion for was the possibility of offending the secretary.

Characteristics of a teacher transitioning from the institutional to the inter-individual MMS

Only one teacher demonstrated this transitioning between the *institutional* to the *inter-individual* MMS in her interview. Katherine offers a lucid, and quite compelling philosophical stance regarding her purpose as an educator, which she believes is to support the socio-emotional competence of the children first before engaging them in academia. Like most of the teachers interviewed, she works in an urban, impoverished neighborhood. She relates how she assesses her students' needs on a daily basis, not only for academics, but also for their emotional well-being. She says that she has built a close, trusting relationship with the parents that they would feel comfortable letting her know if there was something she should know about regarding the student that day. One mother, for example, texted Katherine to let her know that her daughter and she were in an argument that morning, and that her child may not be in the best mood that day. This information is important for Katherine in addressing the needs of this student, where she did not push the student to participate, and did not take it personally if that student was not interested in her work.

Teachers' Cultural Competence

Responses from the cultural competence questionnaire, based on the four constructs of the cultural intelligence scale did not elicit clearly demarcated lines between the four (*metacognitive*, *cognitive*, *behavioral*, and *motivational*) intelligence constructs, whereby the teachers could not differentiate their responses to some of the questions that appeared in the separate constructs. For example, teachers often provided similar responses to a question in the *metacognitive* CQ construct asking about how they check for accuracy of their cultural knowledge as they interact with their students from different cultures and a question in the *motivational* CQ construct asking them to describe how they deal with situations when adjusting to student cultures that are new to them. Like this, there were many other overlaps between the four constructs. Therefore, a holistic analysis, or synthesis and interpretation of teachers' cultural knowledge systems are presented followed by a description of some examples of the ways in which these cultural knowledge systems appear in the classroom. In this regard, the cultural knowledge systems described the ways in which teachers *understood* their experiences with their CLD students, and the classroom manifestations of these cultural knowledge systems provided some understanding of how these teachers' *approached* their work with their CLD students.

Manifestations of teachers' cultural knowledge systems that informed their understanding of the work with their CLD students

The following table provides a synthesis of the cultural knowledge systems teachers utilized in understanding their CLD students. Two major categories emerged which are represented as "locus of knowledge." The internal and external dichotomy came from previous studies utilizing Kegan's framework where *interpersonal* (externally through interpersonal relationships) and *institutional* (internally through self-authored principles) dichotomy emerged in terms of how teachers made sense of their experiences. In this study, however, this dichotomy was more difficult because teachers from both systems relied on both forms of knowledge systems with the exception of the guiding lens evidenced only by the *institutional* meaning-makers. This dichotomy is still useful, but has been used with caution because how teachers understand their work with their CLD students is a very complex phenomenon and the simplistic representation of this complexity as provided below will no doubt appear to minimize this complexity. However, the table is a useful tool for the purpose of discussion.

It should be noted also that the external knowledge source is applicable in so far as one comes across novel situations; however, over time this external knowledge becomes internalized and would become an internal source based on previous experience. It must also be made clear that tapping into both the internal

and external sources occurs oftentimes simultaneously. Again, for the purpose of discussion, these will be separated out into their respective categories, internal source and external source.

Table 2: Cultural Knowledge Systems

Locus of Knowledge	Examples	Mode of Inquiry
Internal Source 'self as primary source'	previous experience, language experience, encounters with difference, guiding lens	learning through direct experience
External Source 'other as primary source'	students, families, colleagues, friends, conference, student database text	ask, listen observe, research

Internal source

The teachers in this study utilized their background knowledge in understanding and approaching their work with their CLD students. This included previous experiences such as their upbringing or experiences with their students, their language background and/or experience learning language, previous encounters with people who were culturally different from them, and the guiding lens or principles that they used to understand their CLD students. For example, Brenda drew on her experiences as an immigrant to understand her students' experiences. Teachers such as Barbara and Katherine used their understanding of their students' language to interpret the struggles students might have in learning English. Others such as Kay and Ramona drew upon their previous language learning experiences to understand the language needs of their students. Teachers also drew on their experiences with people from other cultures through their travel experiences and interactions on a local level such as living with roommates at college, working in diverse communities and through friendships with people from other cultures to understand and connect to their CLD students. However, in the examples provided, having experiences with people from diverse backgrounds left teachers with mixed impressions of their current work with their CLD students.

Another way in which teachers understood their students is through their guiding lens, or self-authored principle in Kegan's (1982, 1994) terms. The examples teachers provided present the ways in which they utilize the often-overlapping lenses of equal opportunity, justice, and socioeconomic disparities to understand their work with their CLD students.

External source

In addition to these internal knowledge systems, teachers also utilized external knowledge systems to understand their work with their CLD students. These external knowledge systems included their students, colleagues, parents, friends, conferences, student database and text as resources to inform their understanding of their CLD students. The external sources were employed particularly in novel situations. Also it should be noted that using parents as resources was evident for teachers who worked in the primary grades where students had difficulties articulating details about their own cultures.

The most commonly cited way in which teachers understood their students was through the students themselves. Students were considered holders of knowledge for most teachers, whereby teachers would learn about them through talking to them, asking them questions directly, listening to them, reading their work, and observing them.

Georgina learned about her students' backgrounds from conferences she has attended in the past. In particular, she learned about Hmong culture at one of the conferences she attended. She did not however, notice that one of her students was Hmong until the student presented a power point on oppression and described her own experiences of being Hmong from this perspective. Nikki uses a school database to retrieve students' English proficiency levels. She often finds that she is able to predict whether or not her students are from home where parents are separated or divorced by looking at the addresses provided for their parents. In other words, she gains insight into their family situation. She also tapped into textual knowledge to learn about Afghanistan through reading two books, *Kabul Beauty School* and *A Thousand Splendid Suns*. Although Katherine points out that "reading books and reading research" were the least important resource because they are not "living and breathing," she does demonstrate extensive knowledge of the literature on education such as works that help her understand the language and culture of her African American students.

Manifestations of teachers' cultural knowledge systems that informed their approach in their work with their CLD students

The previous section included a discussion about the knowledge systems that teachers tapped into, to inform their understanding of their CLD students. In this section, the discussion will focus on how this understanding then informs the teachers' *approach* in their work with their CLD student. The examples of approaches extrapolated from the data were analyzed and grouped into the following categories using inductive and deductive coding methods: cultural differences, linguistic needs, content-area instruction, classroom environment, and cross-cultural interactions.

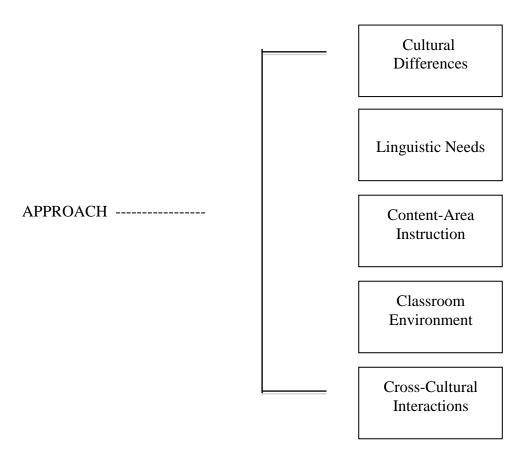


Figure 1. Manifestations of teachers' cultural knowledge systems in their approach.

The teachers discussed how they addressed cultural differences in the classroom, which ranged from celebratory type perspectives such as celebrating *Dia de los Muertos*, a Mexican tradition celebrating their ancestors who have passed, and the Chinese New Year to some deeper level perspectives, which involved student participatory structures, or how their students' cultures informed their participation in the classroom.

All of the teachers described ways in which they often used their knowledge of language in addressing the linguistic needs of their CLD students that warrants some discussion at this time. There were two ways in which this was demonstrated. The first way was through *specific language knowledge* and the second way was through *universal language knowledge*. Teachers used specific language knowledge when they drew upon their understanding of the specific language spoken by the student to address their students' needs. In most cases in this study, this meant that the teachers drew upon their knowledge of Spanish. In one case, Katherine, who works primarily with African American students draws upon her knowledge and study of African American vernacular to inform her approach. Teachers also used their universal awareness of language, that is their experiences learning various languages, in order to address the linguistic needs of their students. When teachers had both specific and universal language awareness, they often used a combination of these two types of language knowledge systems to meet their students' linguistic needs.

The following table presents teachers' self-assessment of their language abilities obtained from the demographics questionnaire and the interviews. It has been included because of the importance some literature (Shannon & Begley, 2008) places, on the notion of bilingualism, particularly in interacting with other cultures. Six teachers reported being monolingual speakers of English with three teachers feeling competent in English-only and the other three teachers reported some experience with either studying or "picking up" other languages. Bilingualism for the teachers in this study was limited to Spanish and English only. While being bilingual helped these teachers connect to their students or explain difficult concepts to them, monolingual teachers demonstrated the same capability by knowing a few words in their students' languages. However, they could not rely on Spanish to communicate to their students and had to use scaffolding techniques, nonverbal behavior, and other such strategic ways to explain complex concepts to their students. Many of these teachers would also utilize students' writing to learn about their language needs and approach their instruction from this bottom-up approach. These methods helped inform teachers' universal language awareness.

Table 3: Teachers Language Experiences

Participant	Self-Reported	Language Background/Experiences
	Language Ability	
Annie	monolingual	English
Brenda	bilingual	English/Spanish
Heather	bilingual	English/Spanish
Georgina	bilingual	English/Spanish
Nikki	monolingual	English
Malorie	monolingual	English
Ramona	monolingual	English; studied Latin, French,
German	picked up Russian,	
Hindi while travelling		
Kay	bilingual	English/Spanish
Barbara	monolingual	little bit of Japanese and Spanish
Katherine	monolingual	English; studied Japanese

The teachers often spoke about their lack of knowledge in Spanish as an obstacle in their teaching to meet the needs of their linguistically diverse students, however often the over-reliance on Spanish, for example, can alienate students whose native language is not Spanish. Instead, for some teachers, using student data from their writing or speaking, and using *universal language knowledge* helped to support their work with students from different language backgrounds.

In addition to addressing linguistic needs, some teachers discussed the characteristics of their classroom environment that provided insight into their approach. Several teachers described ways in which they created a family atmosphere in their classrooms for their students. Katherine discussed ways in which she nurtures a safe and trusting environment in her classroom. For example, when Katherine encountered an incident of theft in her classroom, she tried to find out why this student would steal from her. Through her conversations with him, they first acknowledged that this was occurring, and after building this trust and shared space, she learned that he was homeless for the last three years of his life and had nothing stationary. She explained, "when he felt like his basic needs were being met and the classroom could recognize that was part of the deal for him, they all honored that and he stopped stealing not right away, but by the end of the last two to three months." Eventually, the class acknowledged to him that he did not earn the nickname "sticky fingers" anymore, and that he had worked through that.

Lastly, teachers described how they work through cross-cultural interactions within their classrooms and school-wide. For example, Barbara narrated an incident involving a female Somali student in 6th grade, who was beaten up after school and called a terrorist soon after September 11th. After learning about this, Barbara and her colleagues came up with a strong lesson created by the anti-defamation league focusing on the consequences of hate. What came out of this tragic event was a powerful lesson, she felt, that made students start advocating for each other where over the years, she has overheard them make comments in the hallways such as, "Hey man, that is a first level [of hate] comment." She felt that this provided students with a sense of safety and an open forum to call each other out on comments or behaviors that marked some level of hate. She felt that this helped to dispel some of the cultural misconceptions and language misconceptions.

CONCLUSION

In light of the rapidly changing landscape of schools today, this small-scale study explored how ten public school teachers understood their experiences with their CLD students using both the constructive-developmental theory and the cultural intelligence framework. This study revealed the complex ways in which teachers understood the role of culture in their daily work and moment-to-moment interactions with their students.

While understanding a teacher's MMS provided some important insight into the qualitatively different ways in which teachers address their work with their CLD students, contrary to Kegan's (1994) assertion that people should be minimally at the *institutional* system to work effectively with diversity, this study could not draw any connections between a teachers' developmental levels and how effective they were in their work with their CLD students. Future studies that include classroom observations and artifacts might be able to speak to the relationship between MMS and the *effectiveness* of teachers in their work with this population. In terms of understanding their sense of inadequacy in working with this population, it was found that teachers operating from both the *interpersonal* and *institutional* MMS demonstrated the potential for feeling inadequate. It could be hypothesized based on the respective tendencies characterizing each system that the teachers utilizing the *interpersonal* system may take situations quite personally because they are embedded within relationships and external feedback matters deeply to them. Likewise, those operating from the *institutional* MMS may also have incredible difficulty dealing with situations that go against their internal, self-authored principles of equity and social justice, as this study uncovered through the interviews with these teachers. Data in this study suggests that understanding MMS has more utility for administrators and teacher leaders in supporting teacher

development, understanding teacher group dynamics and addressing this sense of inadequacy many teachers often face in the initial years of teaching. Future studies on the implementation of these practices based on MMS can shed more light in this area.

The findings in this study also confirmed that the teachers in this study all made certain accommodations for their CLD students though there was a wide range of variation inherent in these approaches. In some cases, teachers discussed how they simply did not know how to reach all of their students. From their demographic questionnaires, it became clear that ongoing professional development played a larger role than their educational background or length of time as a teacher in helping these teachers understand the complexity this work entails and in providing concrete classroom application tools that supported these teachers in this very important work.

Another important notion brought to light in this study was that although this study initially focused on students who were culturally and linguistically diverse, it became clear that many of the teachers questioned the narrow definition of culture in the interview questions based on the cultural intelligence scale. Eight of the teachers veered from the cultural competence interview questions quite frequently and this was also considered important data for this study. They often displayed a sense of resentment towards the additive ways in which culture was incorporated into their schools, however they did acknowledge the importance of the deeper level structures of culture. Seven teachers in this study found that the notion of culture as presented in the cultural competence interview questions was too narrow in scope, and that instead for example, understanding their students' living situations, family structures, socioeconomic situation, and background experiences were more important to them in addressing the needs of these students. As such, rather than cultural competence, a teacher may require another kind of competence, the ability to negotiate meaning emerging from past and present experiences and the moment-to-moment interactions within the context in which the teacher and students find themselves. Professional development on reflective and practical strategies teachers can employ in developing this contextual competence could be an important area to examine in future studies.

PEDAGOGICAL IMPLICATIONS

As our world is becoming increasingly interconnected, teachers understand the importance of preparing children to meet the demands of the 21st century on the global platform. The question is are the teachers prepared for this shift within themselves and in their own interactions with their students? Are they able to see their students as resources of gifts and abilities and as contributing members of society?

Darling-Hammond (1997) captures the challenges facing our teachers today in the following excerpt.

Meeting the challenge of cultural diversity is an agenda that is central to today's quest to develop schools that can educate all students for the challenging world they face – a world that is both more complex than ever before in our history. The work of educating educators is, at root, the work that will enable us to sustain a productive and pluralistic democracy, for it is the capacities of teachers that make democratic education possible – that is, an education that enables all people to find and act on who they are; what their passions, gifts, and talents may be; and how they want to make a contribution to each other and the world (Darling-Hammond, 1997, p. viii).

The classroom can be an opportunity for teachers to engage with students in these types of conversations, where every student is considered a valued member of the global society. In order to do this, however, teachers need be adaptive experts (Hammerness et al. 2005) to the ever-changing needs of their students and be open to change and difference themselves.

Self-reflection can begin with an exploration of seeing themselves as cultural beings with their own stories and histories. Some teacher preparation programs encourage students to participate in communities very different from their own and reflect on their experiences of comfort and discomfort, constantly challenging themselves about how they see themselves in relation to the "other."

They can be encouraged to write narratives and cases about instances that made them dig deeper through self-introspection, what Daloz Parks (1999; 2000) terms "shipwreck-moments." They can also participate and reflect on fieldwork experiences within diverse school communities or engage in international teaching and learning experiences where they reflect on how they see themselves and their relationship with communities within these contexts.

(See Goodwin, 1997; Hollins,1997; King et al., 1997; Melnick & Zeichner, 1997; Murrell & Diez, 1997; Hamacheck,1999; Lipka & Brinthaupt, 1999; McLean, 1999; Zehm, 1999; Gay, 2000; Banks et al., 2005; Smolcic, 2011).

A powerful self-reflective tool teachers can use in understanding the specific needs of the students within their context, while reflecting on their own limitations and moments of growth, is action research or practitioner-oriented research. Action research follows a cyclical model of instruction grounded in the context in which teachers work, where teachers identify their own and their students' needs, plan instruction embedded within research, and engage in ongoing assessments and reevaluation of their thinking and approach to teaching based on successive interventions to improve their understanding of the phenomenon under investigation. In the context of this study, teachers can begin to think about their own layers of culture, how they make sense of their experiences with their students from different cultural and linguistic backgrounds, and what they need to do to work through their own preconceptions or misconceptions in attempts to negotiate meaning with their students. Once a teacher engages in this type of ongoing self-reflective practice, they have a powerful means by which to address their students' needs while constantly reflecting on themselves and the process evoked to meeting those needs (Molina, in press).

Nieto (2004) acknowledges that there is no way for teachers to learn everything there is to know about culture, as culture is fluid and ever changing. A better way to approach differences, she says, is to look at culture, not from a "tokenism" perspective where stereotypes can be reinforced such as celebratory events or style of dress, but from a more holistic perspective. Nieto (2004) suggests that it would be more important for teachers to understand how cultural and linguistic differences might affect student learning and focus on ways in which to scaffold their

learning.

What appears to be necessary for meeting the needs of diverse students in helping them negotiate meanings is a teacher who is able to look beyond individual or personal constructions, to one founded on the active discoveries this mutuality, or true negotiation of meaning, entails. The phrase, "negotiation of meaning" is defined in the field of second language acquisition as the ways in which language learners attempt to understand each other (Foster & Ohta, 2005). These strategies include checking for comprehension, requesting for clarification, and modifying output. Interactional sociolinguist, John Gumperz (1999b), also attributes negotiating of meaning beyond that of words, but including prosody and register that signal contextual meanings and roles of the participants. When language learners are attempting to negotiate meaning with native speakers of the language they are learning, and have not acquired such subtleties of meaning underlying communication behaviors and norms as yet, it can often lead to miscommunication, known in the field of second language acquisition, as sociopragmatic failure. It is important to recognize these subtle communication skills required by their students as they communicate and attempt to understand intended meanings of the native-speaking culture. Including real case studies, scenarios and enactments of potential communication failures and misunderstandings between students and teachers would provide teachers with additional lenses and reflection opportunities to recognize, understand, and interpret possible miscommunications and be prepared with potential strategies for addressing similar instances in the future. For teachers to communicate and interact authentically with their CLD students, it would be important for teachers and students to mutually move beyond language level negotiations, but also consider contextual, situational, and cultural levels of interpretation.

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