

Journal of Transformative Leadership & Policy Studies

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JTLPS

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California State University, Sacramento
Sacramento, California

**Editor
Porfirio Loeza, Ph.D.**

Professor • Graduate and Professional Studies in Education
California State University, Sacramento
Sacramento, California



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Address all correspondence to:

Journal of Transformative Leadership and Policy Studies
Doctorate Program in Educational Leadership
College of Education, Sacramento State
6000 J Street, Sacramento, California 95819-6079

Email: jtlps@csus.edu

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Letter from the Editors

The *Journal of Transformative Leadership and Policy Studies (JTLPS)* is a system-wide, open access, and online journal with a print edition representing the California State University System. The journal's focus on supporting and disseminating applied research pre-kindergarten through higher education uniquely positions the journal among the varied body of educational journals. Realizing the complexities that underscore educational organizations, the journal aims to inform practice via the development of wide-ranging types of academic genres, including, but not limited to, exploring issues of equity and achievement, STEM in education, and exemplifying how leadership and policy influence educational change.

This volume includes two reflective essays that speak to transformative leadership and the policies needed for transformative change to occur in both public schools and community colleges. Francisco Rodriguez, the newly appointed Chancellor of the Los Angeles Community College District, met with members of the editorial team for an intimate and transparent question and answer session on transformational leadership. He provides a critical perspective on the leadership policies he will consider to mediate change for the nine-campus district. According to Rodriguez, to promote institutional change you need the "Three C's"—Courage, Conviction and *Coraje* (valor and boldness). This refers to having the courage to facilitate conversations about social justice aimed at redressing educational disparities. Ramona Bishop, Superintendent of the Vallejo City Unified School District, provides a leadership perspective on the need for transformational leaders in inner-city schools. Her testimonies allude to her own leadership skills and approach to transformational leadership. She speaks to her role as being a fastidious facilitator, unselfish community-builder, an approachable intellect, and most importantly, a compassionate listener. Bishop's use of quotes, particularly from Horace Mann, the first Secretary of Education, vividly brings alive practices that underscore school transformation.

The Viki Montera article provide insights to issues of assessment, curriculum and pedagogy reform for a more equitable and accountable educational system. The au-

thor illustrates one school's effort to expand assessment and accountability activities through the use of assessment research literature and dialogue throughout the school community. In turn, Rose Borunda and Crystal Martinez-Alire point to pedagogical practices that embrace Native American cultural values. Five developmental theorists cited in this concept paper speak to pedagogical practices shown to be in alignment with American Indian cultural orientations and advance educational success.

Three book reviews are included in this issue. Bryan Rogers reviews *Pathways to the Common Core: Accelerating Achievement*. An overview of the possible arguments both for and against the new Common Core State Standards (CCSS) are discussed. The prose of the introduction and discussion is lighthearted and persuasive towards viewing the CCSS as a golden opportunity to rebuild and retool education modes and assessment means. Lisa Romero reviews *Public Policy and Higher Education: Reframing Strategies for Preparation, Access, and Success (Core Concepts in Higher Education)*. Romero applauds the authors for their efforts to develop a resource for higher education aimed at explaining the relationship between political ideology, policy decisions, and outcomes affecting college opportunity, access and success. Sarah Graham and Brandon Jougatos review *Understanding Community Colleges*. Their analysis provides a comprehensive analysis from a critical and theoretical perspective of scholarly research on how to improve access to students. The authors recognize that in order to influence the diverse populations they serve, instructors must be aware of how to teach the skills needed in a way that meet the needs of diverse learners.

This volume includes a STEM (Science, Technology, Engineering, and Math) report based on a California State University (CSU) doctoral fellowship. The authors, Randy Kilmartin and Katrina Pimentel, provide insight into practices that influence underrepresented minority high school students' participation in STEM. The report is underscored by practical recommendations that may assist policymakers, industry leaders and educators in advocating for equity and inclusion in STEM education. The Editorial Board of *JTLPS* would like to thank the authors, the

Chancellor's Office of the California State University, and the College of Education at California State University, Sacramento for their support of this journal and the field of education. The editorial team especially would like to recognize the journal's editor, Porfirio Loeza, for his own transformational leadership in guiding the production of this volume. *JTLPS* invites scholars and practitioners to submit papers on a range of topics pertinent to leadership and policy studies in education and STEM education.



Carlos Nevarez, PhD
Executive Editor



Porfirio Loeza, PhD
Editor

ARTICLE

Imagining Alternatives: The Educational and Public Nature of Assessment

Viki L. Montera, Sonoma State University

ABSTRACT

Assessment and accountability are words that have become synonymous with standardized testing. This view has narrowed the curriculum and limited the nature of learning and schooling experiences for children. This narrow focus has also driven educational practices away from ideas found in current learning theory. The following case study illustrates one school's effort to expand assessment and accountability activities, to bring assessment practices in line with recommendations in the learning and assessment research literature and to encourage dialogue throughout the school community regarding the school's program and students' learning. Using a narrative constructed from data from one of the

school's assessment activities, the author, who was also serving as the school principal at the time of the event, discusses the complexities and potential of making student learning public and involving the public in assessment. Creating a public forum to explore ideas and conceptions about schooling and learning among adults and children links school accountability to awareness and understanding of school purposes and pedagogy. This democratic aspect of assessment and accountability may hold power to influence school reform and imagine educational alternatives beyond the reliance and acceptance of standardized testing as the gold standard.

Imagination is not only the uniquely human capacity to envision that which is not, and therefore the fount of all invention and innovation. In its arguably most transformative and revelatory capacity, it is the power that enables us to empathize with humans whose experiences we have never shared.

– JK Rowling, 2008

In a review of 10 years of research on assessment, Broadfoot and Black (2004) state that it is “impossible to imagine” assessment processes in formal schooling that challenge prevailing current practices that are “born of the modernist assumptions and educational needs of the nineteenth century” (p. 20). Yet, that may just be what is required. According to Rowling, imagination provides a

means for seeing possibilities different from those that we know. Heckman and Montera (2009), in their work on school reform, argue that imagination and invention are needed in the work of transforming our schools. They further state utilizing imagination provides opportunities for moving beyond our long accepted taken-for-granted “modernist assumptions” of the nineteenth century.

Assessment and accountability have become synonymous with standardized testing. This view ignores the broader meanings embedded in these two words. The negative implications of this narrow view of assessment and accountability on student learning and educational outcomes have been well documented and argued, including a narrowing of the curriculum to what is tested and students' misapprehension of their success as measured by the test. (Lemann, 1999; Koretz, 2008; McNeil,

2000; Mintrop, Heinrich, & Suderman, 2009; Ravitch, 2010; Sacks, 1999; Sirotnik, 2002; Smith, 2004). In 2001, Cizek looked closely at the testing issue from both positive and negative impacts. In his piece on the unintended consequences he argues for a much needed debate, "High stakes tests: we do not know how to live with them; we cannot seem to live without them" (p. 26).

However, despite these calls for debate and arguments to limit their use, standardized testing, as the primary means of assessing students and holding schools accountable, continues to prevail and hold center-stage (Au, 2007; Honig, 2006; Weaver-Hightower, 2008). The latest version of Federal Policy called Race to the Top is cast as an opportunity to gain waivers from No Child Left Behind requirements. This policy, however, continues and expands the use of standardized test scores in assessment and judging schools' effectiveness. The policy calls for linking standardized test scores to not only student and school performance, but also to teacher and principal performance (McNeil & Klein, 2011).

Continuing the argument against this narrow focus on testing as the gold standard for assessment and accountability is important for educators and researchers. However, equally critical is the need to simultaneously create and advocate for what Sirotnik (2002) calls "socially responsible" systems of assessment and accountability built upon current principles of learning. Sirotnik (2002) describes assessment as the gathering of data and accountability as what is done with the data. Currently, data are narrowly defined as test scores. Assessment is seen as gathering those data (test scores). Accountability is then seen as posting of those scores for the public and others to use in making judgments and educational decisions about the value of school programs and school personnel. Instead of this scenario, Sirotnik (2002) argues for the development of a "socially responsible" assessment and accountability systems. Such systems would utilize multiple indicators (quantitative and qualitative) of student performance "that are sensitive to the needs of each individual and to the purposes and complexities of schooling, including contextual conditions..." (p. 666). The system would incorporate many forms of performance assessment and embrace democratic participation of students, educators, and community members. It would also be consistent with current knowledge about child development and learning.

Eva Baker (2007), in her AERA Presidential Address, entitled "The End(s) of Testing," extends Sirotnik's (2002) argument. She advocates for the use of a variety of measures and means for designing assessment processes. Like Sirotnik (2002), she raised the concern of the "...evidential disconnect between test design and learning research..." (p. 310). The disconnection between learning theory and assessment practices is a common concern throughout the research (Bransford et al., 2000; Broadfoot et al., 2004; Pelligrino et al., 2001). As Baker (2007) concludes:

...unless we find something tangible, beyond a test score, that engages and fulfills students and teachers, education will continue to shrink and shrivel, and with it our chances to balance our hopes and aspirations with the comfort of accomplished learners" (p. 315).

Baker (2007) calls for attention to new means of assessment that focus on current learning theory. This call is consistent throughout the literature on learning and assessment (Bransford, Brown, & Cocking, 2000; Broadfoot and Black., 2004; Pelligrino, Chudowsky, & Glaser, 2001). Herein, lies both an opportunity and a challenge for educational leaders—to seize the intense focus on assessment and accountability and reframe the views and practices of assessment and accountability. And, in the process, also possibly re-frame our schools.

Carl Glickman and Derrick Alridge (2001) present an idea that may advance Sirotnik's call for responsible accountability and Baker's and others' pleas for multiple means of assessment that grow from current literature on learning. Their idea, simply stated, is "going public" with student learning – making learning much more transparent to students, educators, families, and community members, in other words, to the public. Democratic ideas are not often reflected or encouraged in educational assessment and accountability methods. Perhaps, recognizing and reconciling this omission may move schools and their assessment and accountability practices toward some of the goals called for by Sirotnik, Baker and others.

Developing alternative assessment and accountability processes may also provide a necessary forum for the examination of long-held taken for granted "modernist assumptions" about schooling and learning. These conventional ideas are embedded in the mental schemata of

those who make up the school and its community. By its very nature, public education in a democracy is a political undertaking involving the polis (educators, politicians, parents, community members). The key to reforming schools may lie in our ability to simultaneously reform the conceptions of schooling of the polis's members, while also reforming schools. Creating experiences that bring educators and citizens together in exploring and debating understandings (mental schemata) about schooling may hold promise in advancing school reforms (Heckman & Montera, 2009). Assessment processes can provide a means to 'go public' with children's learning and provide a forum for public examination of our "modernist assumptions."

"Going public" moves assessment and accountability away from national policymakers and corporate interests to the interests of individual students, schools, and communities. Three aspects of 'going public' frame this work. First, 'going public' means a focus on local assessment tied to classroom and school programs. 'Going public' challenges educators to move assessment and accountability away from annual reports presented in newspapers to ongoing and in-depth descriptions and discussions of student learning at the school site with many constituents. In section I, *Going Public: Focus on Local Assessments*, the background and development of the process undertaken at the school will be presented.

Second, 'going public' means engaging in interactions with stakeholders around and about students' learning. It brings together stakeholders in school and classroom settings to democratically account for and assess student learning and school programs. In section II, *Gong Public: Engaging Stakeholders*, a narrative of one assessment experience is presented. This narrative was constructed from empirical data gathered during the events and processes of one assessment activity. Engaging in the narrative taps into the ability to "envision alternatives—to conceive of other ways of being, of acting, of striving" (Gergen as cited in Bruner, 1990, p. 109-110). This narrative may be a way to tap into imagination and provide an opportunity to bring others vicariously into an alternative school culture to expose and examine ideas about learning and assessment.

Third, and most importantly as a result of engagement, 'going public' means democratically developing common conceptions and values for learning within a school and community. Opportunities are created to collectively ex-

amine taken-for-granted ideas (mental schemata) about learning in order to reform conceptions guiding a school's program and practices. In section III, *Going Public: Developing Common Conceptions*, seven key ideas emerging from the literature on learning and assessment are used to discuss the narrative and consider how these ideas influence the development of an alternative assessment process and common conceptions about learning.

This article presents an empirical case study of one school's efforts to develop an alternative assessment process that reconciled the external uses of assessment with its central role as a tool in the teaching and learning process by "going public." What is presented is an "instrumental case study." It is an instrumental case study that has a clear purpose to "accomplish something" (Stake, 1995, p. 3). The principal and the teachers set out to develop an alternative assessment process to counter the growing reliance on standardized testing. This case study grew from "lived experience" (van Manen, 1990, p. 9) wherein the researcher (the principal) had the opportunity to "retrospectively" (p. 10) understand and identify the implications of the experience. Empirical evidence was gathered and analyzed in describing this work and in constructing the narrative presented here. More detail regarding the methodology of this research is presented at the conclusion of the article. Importantly, the development of this alternative assessment process called on the imagination of those who were a part of this project and their willingness to take a risk. Understanding this alternative will happen as the reader imagines being a part of this creation.

Going Public: Focus on Local Assessment

Rock City School, in California, was established as a K-8 "alternative" school in the fall of 1973 within a public school district. The genesis for the school came from a group of community activists seeking a school where non-authoritarian, non-competitive, non-sexist methods would be emphasized.

Over the decades, however, the school lost its way as the context surrounding it changed. When many in the district wanted the school closed, the superintendent saw the school as an opportunity. He challenged the staff and me, as the new principal, to create a program built upon the latest and strongest research on learning and child development. In designing the school's instructional program, the teachers and I also had to address the issue of

assessment and accountability. Traditional approaches to assessment would not match the dynamics we were promoting in the learning process.

With a great deal of discussion, debate, and exploration of the literature on cognition, learning, and assessment, we set out to create assessment processes that would match the dynamics we were promoting in the learning process. To guide in the development of assessment practices and activities, we first identified our *overarching goal for assessment*. Recognizing that assessment serves several purposes, we then determined our *primary purposes of assessment*. Finally, we developed *guiding principles* that would be used in creating the activities that would eventually make up the assessment process.

Overarching Goal

In establishing the overarching goal, it was important to state the core objective of the assessment process, as well as what was not going to be the focus. The following overarching goal was established:

Our goal in assessment is to understand and know the complexity of each child's development rather than to compare children with each other. If we are to uphold the tenet that each child is unique, then it is imperative that this belief be reflected in our practices of assessment, as well as instruction. (Rock City School, 2013, p. 12).

At the heart of this goal was focusing the assessment processes on seeking insights and learning about students' knowledge and development. It brought attention to the children's growth and knowledge, rather than on their ranking or on comparisons among them. This goal put the emphasis in the process squarely on the individual child's development.

Primary Purposes

Establishment of the overarching goal was followed by decisions identifying the primary purposes for the assessment process. Assessment serves many purposes and audiences. Of these purposes, the teachers and I agreed upon which of these would be the focus of the work. The purposes identified were:

Purposes of Student Assessment

- To increase student, teacher, and parent awareness of a child's strengths and growth.
- To gain insight into child's thinking and understanding.
- To assist children's authentic development of self-knowledge.
- To inform teachers about the need for programmatic/instructional changes or activities.
- To increase students' and teachers' thoughtfulness about their work.
- To communicate to children and families expectations and standards. (School Handbook, p. 12).

Each of these purposes was grounded in the literature on learning and assessment. We wanted to identify a *child's strengths* and build on their existing knowledge (Bransford et al., 2000; Gonzales, Andrade, Civil, & Moll, 2001; Vygotsky, 1978). By *gaining insight into and understanding a child's thinking*, we would better be able to adjust instruction and provide support as needed (Langer, 1997). The development of one's *self-knowledge* has long been identified as critical to one's success (Pintrich, 2002). The information would be helpful in *developing the school program and instruction*. Finally, helping *children and families understand the school's program* and its contribution to learning was vital in addressing the accountability aspect of our program.

In their review of the literature on assessment, Pelligrino et al. (2001) identified three main purposes of assessment in schools. These are to:

- a. assist learning
- b. assess individual achievement
- c. and provide information upon which to evaluate programs (p. 37-40)

The purposes developed by the school staff are consistent with these three main purposes identified in the literature. Table 1 compares the school's purposes with these three main purposes of assessment found in the literature.

This comparison and connection to the research literature on assessment helped guide our decisions regarding the development of the assessment process. It also ensured that we were meeting the multiple purposes embedded in assessment practices.

Table 1
Comparison of School Purposes with Research Literature

Purposes of Student Assessment (Rock City School)	Common Purposes (Pelligrino, et. al., 2001)
To increase student, teacher, and parent awareness of a child's strengths and growth	b. assess individual achievement
To gain insight into child's thinking and understanding	b. assess individual achievement
To assist children's authentic development of self-knowledge	a. assist learning b. assess individual achievement
To inform teachers about the need for programmatic/instructional changes or activities	a. assist learning c. evaluate programs
To increase students' and teachers' thoughtfulness about their work	a. assist learning b. assess individual achievement c. evaluate programs
To communicate to children and families expectations and standards	c. evaluate programs

Guiding Principles

From these purposes, guiding principles were developed to direct the design of the school's assessment process and activities. Again, the research on learning was used in deciding on these principles. The "Guiding Principles" established by the staff are identified below.

- The assessment process/activity will be child-centered. The focus will not be on the outside knowledge given to a child, but what the child is coming to know, understand, and do.
- The assessment process/activity will be interactive in nature. It will involve discussion, conversations, and writing with students, teachers, and parents.
- There will consistently be an opportunity for children's self-assessment. The teacher will help guide this process, but the child will be an active participant in the assessment activity rather than a passive receiver of an outside evaluation.
- The assessment process/activity will focus on a child's assets and growth.
- As much as possible the assessment process will be contextualized, in that it will take place within the process of learning-in-action rather than solely [focusing] on a final product.

- The assessment process/activity will be on-going throughout the child's time at the school. This process will be qualitative and will involve both formal and informal assessment opportunities.
- Assessment will be linked to the goals/standards identified in the [school] handbook.

These guiding principles will be discussed in-depth in the third section entitled *Going Public: Developing Common Conceptions*.

Formal Assessment Process

From the guiding principles, a formal assessment process was developed. The process and activities that made up the formal assessment process spanned the school year, with a Fall Family Conference at the beginning of the school year, a Mid-year Assessment Activity, and a final end of the year Spring Narrative. Each of these is described below.

Fall Family Conferences

Prior to the Fall Family Conference, students planned for the event by reviewing their work from the previous year and considering areas of development and future growth they would like discussed with their teacher and

family members during the conference. Students took an active role in describing and explaining their progress and plans for the school year. In planning for the conference, students reflected on previous work and growth. They developed goals for the year that would be used by them, parents and teachers throughout the year in assessing their progress. A student's teacher moderated each individual Fall Family Conference, however, the student was the focus and the critical participant in the event.

Mid-year Assessment Activity

The Mid-year Assessment Activity varied as we tried out numerous means to integrate learning, assessment, and school-family-community interactions. It was our hope that this effort to strengthen our assessment process at the school would be intimately connected to our day-to-day work with children. We also hoped it would reveal to students, parents, teachers, and others outside of the school what children were learning in ways that we felt traditional methods (test scores and report cards) could not reveal. The creative and imaginative activities developed continued to evolve as we learned more and more about ways to enhance our assessment practices and develop student and community learning. An illustration of one of these events is presented in the next section.

Spring Narrative

Each spring, prior to the end of the school year, families received a "comprehensive narrative assessment" (School Handbook, p. 15) of each child's development. This narrative was tied to the school's program and identified goals. It was also tied to students' identified goals from the Fall Family Conferences. This was the student's summative assessment of their work and development during the school year. Teachers developed each narrative from data gathered throughout the school year on the child's performance. Students contributed to the narrative with their own self-assessment. These narratives were provided to families prior to the end of the school year to enable further discussion of a child's growth. They were also used in the Fall Family Conferences the following school year. These annual narratives captured the child's development throughout their time at the school.

We worked to create an assessment process that embraced the multitude of factors that influence children's learning and engendered discussion and learning about

this complexity with all stakeholders. The assessment process developed incorporated both formative and summative methods. Formative assessment occurred during the learning processes that led up to the completion of students' projects. Much of what was presented during the Fall Family Conferences and the Mid Year Assessment Activities was formative in nature as will be illustrated in the next section. Summative assessment did happen during the school year upon the completion of a project or assignment. However, the formal summative assessment occurred with the Spring Narrative.

In the next section, a narrative of one of the Mid-year Assessment Activities is presented to illustrate how some of the complexity of the learning and assessment process was revealed and utilized to build understandings of the learners and of the learning process within the school. This example also illustrates the kind of discussion that emerged throughout the assessment process.

Going Public: Engaging Stakeholders

Imagine you are invited to your neighborhood school for an afternoon to talk with children about their work. You don't have any children in the school, but, as a neighbor, you have become acquainted with the principal because you have raised issues about the high decibels of sound emanating from the school playground—sometimes overpowering your own music. You have also talked to the city police about the traffic congestion before and after school. Yes, you are an involved citizen and, perhaps, not exactly thrilled with this school in your front yard. The principal invited you to this event suggesting that you were quite informed about what happened outside of the school and thought it might also be important for you to become acquainted with what goes on inside of the school.

You enter a large classroom filled with 7 to 10 year-olds, their family members, and teachers. Everyone gradually takes a seat. Several teachers take turns in stating the purpose of the gathering and the process. They encourage everyone to seek and share information about students' learning and thinking.

You are then directed to your assigned group made up of 3 children, their guests (parents and family members), and a teacher. The children know this is their time to talk about and share their work with others. Prior to the meeting, they have been given the opportunity during

their school day to decide what they want to share and talk about – many of the projects chosen are in-process, not yet completed work.

A nine-year-old boy starts by sharing a writing project he has been working on. He talks about where he got his ideas, reads a part of the story to the group and then explains where he thinks the story is going next. An adult asks what he does when he can't think of an idea. The boy talks about his own process of dealing with writer's block, which includes "taking a break" or "visiting with his friends." Another adult asks about a finished product. "Do you ever finish a story? What do you do to finalize it?"

The boy talks about conferencing with others and then says, "I follows the steps."

"What steps?" another adult asks.

"The ones on the chart!" the boy responds as he jumps up, runs across the room, and takes a hand-made chart off the wall, which the children created to assist them in their writing process. He returns to the group and quickly begins to explain each step on the chart. The teacher notes his explanation and how he is using this tool to develop his writing.

His mom, sitting next to you, seems surprised by her son's expression and leans over to you and says, "I've never heard him talk like this. I had no idea he was working on this in school!"

The conversation about his writing ends with him sharing where the story might go next.

The next student brings a diorama to the table she has created to represent a scene from a book she is reading. The construction is clearly the work of her 7 year-old hands. After explaining the story and her scene, her teacher who knows reading has not been a favorite activity for this student asks her a question about her reading, "How did you choose this book?" The child shares why she has chosen the book and continues to read this book.

As the child answers the teacher, other questions come from the adults in the group: "What do you think about as you read?" "What other things have you read?" "What is the best part of reading?" All of the questions were seeking the child's considerations about her own reading style.

Then, a parent, who knows that the child struggles with reading and has previously questioned the school's reading program, asks, "Do you ever get to a word you can't read?"

"Oh sure," the girl responds without hesitating.

"What do you do?" asks the adult. "How do you figure it out?"

Again, without hesitating, the child responds, "I skip it!"

There is a moment of silence, a few adults exchange glances. The teacher does not respond right away and another child jumps in, "Sometimes you can get help, but it slows you down."

Two adults, including the one who asked the question, lean forward into the group. One says, "Aren't you worried about missing a word?"

"If I keep seeing it, I might ask for help," the girl responds as the teacher makes a note to explore this idea further with the child.

The third child, who has been enamored with ships for the past year, has chosen to talk about his recent discoveries about the types of ships used in World War I. He presents and explains, in detail, several of his drawings. His attachment to and interest in the topic are evident.

"What do you think you are learning by studying and drawing these ships?" asks an adult.

"Well, I like to see the parts that are on them and how they work," he then pauses briefly, "but my parents said I have to choose something else next time."

His parent quickly responds. "We just want you to learn about other things." The teacher notes the interaction.

After the initial presentations, the teacher asks if there are other questions for the students. As the conversation goes on, the children's participation increases. They begin to ask each other questions and jump in when it looks like a peer needs help.

Next, everyone returns to the large group to share their thoughts about what they have learned and questions they still have. Parents voice surprise by the interactions and thoughts the children expressed. Others still wonder if their child is progressing, as he should. You, along with the other adults, are given a survey to capture your thoughts, questions, and concerns. You are asked to return it to the school the following week.

This assessment event existed within an on-going process. In the days following the event, teachers met with the children to ask them what they thought, how it felt, what they discovered and might do differently. They also followed up on information that arose during the as-

assessment gathering meeting with a student or having an informal conversation with a parent.

During the group debriefing with students, students expressed nervousness, pride, and discovery about what their fellow students were working on.

"I had no idea Jamie was writing a mystery, I want to read it!"

"It felt weird like they were judging me, but when I used to get my report card, I didn't think about it!"

"Two parents made me feel like I hadn't done my research and survey according to logical reasoning and made me feel like I needed to start over.... My insight was that I get too carried away sometime and I forget what is logical."

Teachers also met to share their learning about the children and the process. Their notes were reviewed and activities modified. Small actions were taken, such as following-up with a child or parent or making a programmatic or instructional change.

The surveys that were given to the parents and community members were carefully reviewed to learn about parents and community views, and their concerns and questions. This information was used to create and build other experiences in other venues, from developing articles for the weekly school newsletter to providing items for parent forums or community education nights.

Finally, a report about the event was written by the school staff and sent to the school community, district office, and school board.

Going Public: Developing Common Conceptions

This section explores both the educational and public nature of assessment. In this first section, *The Educational Nature of Assessment*, the previous narrative is analyzed through the lenses of seven key ideas from the literature on learning, cognition, and assessment. These seven ideas are critical aspects to consider in developing assessment processes linked to student learning. Here each idea is elaborated fully and then connected back to the school's developing assessment process and guiding principles. The second section, *The Public Nature of Assessment*, outlines how this process of assessing student learning may also provide a democratic forum for all stakeholders to assess and reconsider their assumptions and understandings of student learning and schooling practices in order to promote school reform.

The Educational Nature of Assessment

Prior to developing the alternative assessment process, the school staff identified several Guiding Principles to be used designing of the activities that made up the school's assessment process. These Guiding Principles correspond to seven key ideas that emerged from the literature on learning and assessment.

The seven key ideas identify the importance of:

1. Eliciting explanations and making thinking visible.
2. Utilizing communities of learners.
3. Developing metacognition and self-assessment.
4. Recognition of existing knowledge.
5. Attending to process and context.
6. Embracing complexity.
7. Linking learning and assessment.

Examples from the assessment events described earlier illustrate a relationship between these ideas and the enactment of the school's assessment principles. Table 2 illustrates the relationships between these key ideas from the literature and the guiding principles developed by the school staff.

The key ideas and the assessment process are discussed in each section below with supporting literature. As with so many aspects of learning and assessment, the key ideas are interrelated and overlapping.

Key Idea 1

Eliciting and Making Thinking Visible

The creation of opportunities for students to express, reveal, and make their thinking visible has been identified as critical in the learning and assessment process. Eliciting these expressions enables adults to understand students' sense-making and better assist them in furthering children's development. Also, by drawing out the learner's thinking, the learner gains insights about his/her own understanding, which is often hidden from them (Black & William, 1998, Bransford et al.; Pelligrino et al.; Furtak et al., 2008).

The first guiding principle focused on students' thinking and knowledge. Children's thinking was made visible throughout the process and in multiple ways and settings in students' classrooms and assessment events. Initially, students were asked to reflect on their classroom work during the time leading up to the assessment event. They then prepared what they would like to share with others during the assessment activities. This process of reflection

Table 2
Research Literature's Key Ideas in Relation to the School's Guiding Principles

Key Ideas Identified from the Literature	Rock City School's Guiding Principles
1. Eliciting and making thinking visible	The assessment process/activity will be child-centered. The focus will not be on the outside knowledge given to a child, but what the child is coming to know, understand, and do.
2. Utilizing communities of learners	The assessment process/activity will be interactive in nature. It will involve discussion, conversations, and writing with students, teachers, and parents.
3. Developing metacognition and self-assessment	There will consistently be an opportunity for children's self-assessment. The teacher will help guide this process, but the child will be an active participant in the assessment activity rather than a passive receiver of an outside evaluation.
4. Recognition of existing knowledge	The assessment process/activity will focus on a child's assets and growth.
5. Attending to process and context	As much as possible the assessment process will be contextualized, in that it will take place within the process of learning-in-action rather than solely focusing on a final product.
6. Embracing complexity	The assessment process/activity will be on-going throughout the child's time at the school. This process will be qualitative and will involve both formal and informal assessment opportunities.
7. Linking Learning and Assessment	Assessment will be linked to the goals/standards identified in the school handbook.

occurred during the school day with teachers and peers. During the assessment event, students discussed their work and responded to questions about that work from their audience made up of family and community members. For example, the student writer revealed his writing process and use of the writing 'chart.' The student reader expressed her thoughts and strategies for reading. The ship historian spontaneously voiced something on his mind that may be troubling him.

Finally, in their debriefing groups, the next school day, students were again asked about what they were thinking in relationship to the process and the discoveries they made about their thinking during the assessment event. As children spontaneously responded to questions in these debriefing discussions, educators gained insights about each child's views and understandings. Subse-

quently, in follow-up classroom projects and activities, they used those insights to further expand the children's knowledge and encourage their growth in these areas.

This idea of making thinking visible in assessment and learning activities was also present for the adults as they experienced these assessment activities and discussed them with other adults prior to and after the events. This process helped reveal adults' conceptions and views of the assessment and learning processes at the school. These revelations provided an opportunity for them to examine their mental schemata with each other.

Key Idea 2

Utilizing Communities of Learners

The research literature conveys the importance of learners' interactions with peers, teachers, and other in-

terested adults in making arguments, elaborating ideas, considering alternative points of views. Adults and children acquire and restructure their knowledge through discourse and interaction with others (Brown & Palincsar, 1989; Cobb, 1998; Furtak et al., 2008; Pellegrino et al., 2001). Vygotsky (1978) stated, "...interactions provide a source of development" (p. 90). He argued for the recognition of the social nature of learning and the "process by which children grow into the intellectual life of those around them" (p. 88). This social nature of learning happens as each person reveals their thinking to others, thus, assisting themselves and others in developing their ideas and thoughts.

The second guiding principle addressed the importance of social interaction in the assessment process. A great deal of interaction happened during and after these assessment events, fostering the development of a community of learners among teachers, students, family and community members. For example, during class planning for each assessment event, students consulted with each other about what they planned to share in their groups. They frequently wrote about their plan and discussed it with their peers and teachers. During the school day, students also had multiple opportunities to collaborate with each other on a class project or assignments such as their writing projects and group science projects.

Numerous forums provided opportunities for the adults to also reveal and examine their own conceptions of schooling and learning. Prior to and after many of these assessment events, teachers came together and examined and discussed the data they had been gathering about children's work and the children's developing learning and thinking. For example, in the assessment event illustrated here, a parent was surprised by her son's work and his explanation of his writing. She had not experienced him doing this kind of work and talking about it as he had done during the assessment event. Later, she and the child's teacher considered ways that she could possibly extend the conversation (and learning for both of them) at home. Several parents also had opportunities to reconsider their views of what was involved in reading. What were the consequences of skipping a word? Is reading more than knowing every word? This developed into a conversation beyond the assessment event that continued and influenced understanding of the act of reading and the school's reading program. In other situations, family members met with teachers following an explora-

tion in the classroom. They discussed their observations and questions about what they experienced in interacting with and observing their children in this process.

Surveys given to the adults following an event, sought the adults' views of the alternative assessment process and activities regarding what they learned and what information they felt was missing in the process. Faculty used these data in planning other events and developed ways to highlight and address questions arising about the assessment process or school's program. These ideas were addressed in presentations at a PTA or site-council meeting, and in a follow-up story in the school's weekly newsletter. Information from the surveys was also used in writing a report of the event and sending it to the district office. The sense of community was extended beyond those directly involved in the school by inviting community members from the neighborhood to participate in the event and to keeping members of the district administration and school board informed of the assessment activities.

Key Idea 3

Developing Metacognition and Self-Assessment

Throughout the learning, cognition, and assessment literature researchers note the importance of developing and encouraging metacognition and opportunities for self-assessment (Bransford et al., 2000; Pellegrino et al., 2001). Urging learners to explain and evaluate their thinking and reasoning greatly assists in the development of a learner's understanding and expertise (Bereiter & Scardamalia, 1989). Ericsson and Simon call this a "think aloud method" (as cited in Shavelson et al., 2003, p. 15). In addition, this activity of thinking aloud about one's thinking and assessing one's own work assists teachers in knowing first-hand how students are making sense of concepts so the educators can improve their instruction and assist in student learning (Bereiter and Scardamalia, 1989).

The third guiding principle highlights the critical importance of involving students in metacognitive and self-assessment activities. In preparing for the assessment events, children were asked to reflect on their daily classroom work and progress. Students chose what they wanted to present at the event. During the assessment event, students were asked to share their thinking and strategies for figuring out what to write about or how to read. They also explained what they knew, how they knew

it, and why they had chosen a topic or plan of action in the project they were presenting. Together these kinds of activities assisted students and the adults in recognizing and understanding students' thinking, what may be influencing students' understandings, and how the students saw their development. For example, one student shared how the questions adults asked her during the assessment activity made her rethink her strategy about how she had conducted what she thought was a "logical" research project.

This idea of student self-assessment was repeatedly built into the school's on-going assessment activities with students' central involvement in their self-assessment during the Fall Family Conferences and culminating with their contributions to their individual Spring Narrative at the end of the school year. As one child explained, "It's good to share what you know, not what the teacher knows about you." How the child sees this "as good" was part of the continued exploration. Together, these interactions engendered metacognition and self-assessment.

Key Idea 4

Recognition of Existing Knowledge

All humans construct knowledge, mental schemata, of their world. They use these schemata in making sense of the world. This existing knowledge, often termed prior knowledge, serves as a foundation on which individuals build new knowledge. Just as this prior knowledge assists in learning, it can also hinder interpretation and development of new knowledge. This aspect of learning leads to the importance of educators and children identifying, understanding, and embracing a student's existing knowledge, their views of the world and the ways that they think about them (Bransford et al., 2000; Gonzales et al., 2005; Vygotsky, 1978).

The fourth guiding principle places the focus on the identification of a child's assets and growth. We created opportunities for children to be expressive and make choices about their learning and assessment. In that process, educators discovered a great deal about students' existing knowledge and how students use that knowledge to make sense of the world. For example, a child explicitly expressed his understanding of a writing tool (his chart), another shared her increasing interest in reading, and another child expressed what he knew about ships, how he built his knowledge about ships overtime, and a

barrier he faced with his parents' efforts to re-direct this interest instead of following his interests.

Each of these examples provided expanded conversations about students' understanding and learning, as well as the adults' views of that learning and the school's program. Embedded in the process were multiple opportunities to explore, to question, and to imagine alternatives.

Key Idea 5

Attending to Process and Context

Learning is not an event, but rather a process of building and creating knowledge and expertise (Sternberg, 1997). In the learning process, as previously presented, learners actively construct knowledge. The context in which this knowledge is constructed can enhance the learning or interfere with that knowledge development (Bransford et al., 2000; Edelson, Gordon, Douglas, & Pea, 1999). Context has been described as the variety of forms of engagement and situations in which an individual participates (Pelligrino et al.). These contexts – the one that exists within the school/classroom and the one with which the learner is familiar in his home or community – influence sense-making (Spillane et al., 2006). Contexts provide the learner with cultural artifacts, tools, and language that "mediate" their learning and cognitive development (Wertsch, 1998).

The fifth guiding principle recognizes the process of learning and the influence of context on that learning. To acknowledge learning as a process rather than event, multiple settings were established to provide students, educators, family and community members with opportunities to assess student learning. Mid-year activities, as the one described here, often focused on student work in process. This allowed the demonstration of a student's ongoing development rather than focusing on the quality of a final product. It also allowed students to exhibit their distributed knowledge (Gonzales, Moll, & Amanti, 2001) in the assessment process. Students responded to questions such as, how they use resources, what meaning do tools have for them, what knowledge and other resources do they draw on in making predictions or plans for next steps, and what barriers do they encounter.

Family and community members were invited to become part of the learning context of the school in numerous ways. The events in which they participated influenced their sense-making of the school's program and

a child's learning in this alternative environment. As one parent wrote, "the alternative assessment process gives students and their families authentic information about progress toward educational goals." Others identified how it assisted in their understanding of the school program. And others voiced concerns about the lack of information gained on the ranking or specific leveling of children. They felt this was needed to help them know 'where their child is' in comparison to others. These contexts led to other contexts for discussing adults' comments and questions.

Key Idea 6

Embracing Complexity

Rapid economic, social, and technological change characterizes the world today. New knowledge and information are increasing at rates not experienced during the previous century. The world students will navigate in the future is largely unknown today (Friedman, 2005). Capturing and promoting this unpredictability and complexity about an ever-changing world requires a multi-faceted assessment process, which is why researchers have argued for developing multiple means of assessing student knowledge and learning (Baker, 2007; Black & William, 1998; Pelligrino et al., 2001; Shepard, 2000).

Many factors influence the learning and assessment processes (Bransford et al., 2000). Assessment of an individual's knowledge at any one point in time is only an approximation of that knowledge (Pelligrino et al., 2001). Creating multiple opportunities and settings for children to exhibit and develop knowledge over time allowed us to embrace this complexity and the long-term nature of learning. These assessment opportunities also promoted students learning by providing a clearer picture of what and how students thought. They also revealed a closer approximation of the child's knowledge development than a one-time summative assessment activity.

The sixth guiding principle establishes the importance of embracing complexity by creating an on-going and multi-faceted assessment process. In the assessment events discussed here, respect for children's ideas was center-stage. Children's responses and thinking were explored rather than evaluated. These events contributed to adults' understanding of the complexity of the learning process from highlighting children's own sense of efficacy in building skills and knowledge to their interests in projects they chose to explore. The open nature of the activi-

ties allowed for the complexity and the many interesting issues in learning and schooling to be revealed and explored in a community of learners rather than controlled and directed. By embracing the complexity and the developmental nature of the work, adults examined different perspectives. They learned from each other. The educators made adjustments in their programs and the parents began to better understand how this alternative program helped their children learn by building on the current research knowledge of learning to change the school's practices and children's experiences.

Key Idea 7

Linking Learning and Assessment

Linking learning and assessment seem obvious. Yet, too often, assessment is viewed as an end rather than part of the process of learning (Baker, 2007). Pelligrino and his colleagues concluded learning is an iterative and not a linear process (Pelligrino et al., 2001). Bransford et al. (2000) identified assessment as one of the critical features of effective learning environments, arguing that learning environments must be assessment-centered, as well as knowledge-centered, learner-centered, and community-centered. Throughout the research literature, the plea is made to build assessment on a model of learning and cognition—a connection that is too often missing (Baker, 2007; Pelligrino et al., 2001; Shepard, 2000).

Pelligrino et al. state, "A model of cognition and learning should serve as the cornerstone of the assessment design process" (2001, p. 3). Therefore, it remains critical that educators strive to link learning with assessment and to conduct assessment activities within the same conditions and environments created in the classroom to encourage student learning. This idea is pervasive throughout this analysis.

The final guiding principle developed by the faculty established the importance of linking learning goals and assessment processes as an element of the assessment design. The framing of this last guiding principle served two purposes. First—politically—to send clear messages to the larger community that the school's goals/standards would serve as the criteria upon which the assessment process would be built. Second—educationally—while this guiding principle largely identified the connection of the assessment process to school goals/standards, in practice it served as a reminder for the educators as they

designed an assessment process that grew out of the learning program they established. Designing assessment practices that were consistent with the instructional program was the impetus for this alternative assessment work. As evidenced in this analysis, the ideas presented in the learning and assessment research literature did serve as a foundation for the development of the alternative assessment activities discussed in this article.

The Public Nature of Assessment

At the beginning of a comprehensive report on educational assessment entitled, *Knowing What Students Know*, the editors state:

The central problem addressed by this report is that most widely used assessments of academic achievement are based on highly restrictive beliefs about learning and competence not fully keeping with current knowledge about human cognition and learning.

(Pelligrino et al., 2001, p. 2)

The process of 'Going Public' shows how this one school attempted to close the gap between its assessment practices and the insights gained from "current knowledge about human cognition and learning." In the process, "highly restrictive beliefs about learning" (p. 2) and schooling were revealed and explored.

Radical change in the conduct of student assessment is deeply connected to the conduct of school (Baker, 2007; Bransford et al., 2000; Sirotnik, 2002; Pelligrino et al., 2001; Popham, 2001; Shavelson et al., 2003; Shepard, 2000). Yet, the reform literature tells us that when reformers urge a shift in schooling practices—there is often resistance from those within and outside of the school (Tyack & Cuban, 1995). This resistance often arises out of a lack of understanding about a reform effort. Spillane and his colleagues (2006) attribute this lack of comprehension or embrace of the new to one's existing mental schemata. When new knowledge does not match the old knowledge there is often conflict with and rejection of the new policies and practices.

We knew we could not merely give up testing without a public and community outcry. Instead, in this assessment process, we replaced the 'giving up' with 'going public.' 'Going public' offers three guides for educational

leaders in addressing alternative assessment and school reform. First, focus on local assessment. Work with school colleagues to develop a local assessment process linking learning and assessment. Second, engage stakeholders. Increase the transparency of your work. Invite stakeholders to interact with students and hear directly from them about their ideas, understandings, and learning. In addition, create opportunities for stakeholders to debrief, debate, and explore their understandings and questions. Third, in doing this, communities of learners can be established to develop common conceptions and understandings about the learning and assessment process. Ironically, the principles and key ideas presented in section III, *Going Public: Developing Common Conceptions*, regarding assessment are also those that educational leaders should consider and incorporate in transforming schooling practices. Keeping these seven key ideas in mind will provide guidance in transforming our schools. As educational leaders, it is important to elicit and make students' and adults' thinking visible within a community of learners. This process engenders metacognition and reflection on the part of the students' and adults. It allows others in the community to recognize each other's existing knowledge and understandings. This should be done overtime within the context of children's learning in multiple venues. Educational reform and learning are complex processes that are symbiotically linked. Embracing these principles and key ideas will engender an environment of learning for children and adults, which will provide openness for educational reform away from our "modernist assumptions" (Broadfoot & Black, 2004, p. 20) and "highly restrictive beliefs" (Pelligrino et al., 2001, p. 2). In order to shift our assessment and accountability practices, we will need to create opportunities such as these to simultaneously reveal, explore, and shift the mental models of the polis (Bransford & Black, 2009; Broadfoot et al., 2004; Heckman & Montera, 2009; Pelligrino et al., 2001).

Conclusion

Assessment has three major purposes: to assist learning, to assess individual achievement, and to provide information for program evaluation (Pelligrino et al., 2001). Some have argued that an assessment activity cannot adequately serve more than one of these three purposes (Pelligrino et al., 2001). Thus, it was important to develop an assessment process incorporating multiple means and

opportunities to embrace rather than limit the multiple purposes of assessment. Doing this engaged the public in the assessment process. These purposes bring attention to the role that “responsible accountability” (Sirotnik, 2002) can play in advancing more effective schooling practices. As Sirotnik concludes, such a system “...accounts in ways that do not stress on-demand, high stakes tests...but that focus instead on a broader array of indicators and resource-rich educational environments characterized by all the good conditions and practices known to facilitate better teaching and learning” (p. 670). Engaging in local assessments and local discussions about student learning does offer “a broader array of indicators” and alternatives to the commonly accepted focus on test scores. Understanding the educational and public nature of assessment provides insight and opportunity for educational leaders to influence public conceptions of the learner and the learning process, and, in turn, possibly transform our schools and schooling practices.

In his address to the John Dewey Society in 1975, Lawrence Cremin argued that, “The proper education of the public and indeed the proper creation of publics will not go forward in our society until we undertake anew a great public dialogue about education” (p. 11). The ideas presented here on alternative assessment engender that dialogue, which may be more needed today, than in 1975.

“Going public” (Glickman & Aldridge, 2001) offers a way to think about the development of local assessment that is socially responsible (Sirotnik, 2002) and utilizes multiple means of assessment (Baker, 2007). It also incorporates features of assessment that have been widely called for by researchers – features that are rarely experienced in current school settings, despite their well-established value (Pelligrino et al., 2001). Lastly, it provides an opportunity for all stakeholders to rethink their ideas of schooling and, perhaps, reframe their schemata guiding their views about schooling (Heckman & Montera, 2009; Spillane et al., 2006) by eliciting and making transparent everyone’s thoughts and actions. Inviting the public to interact with and hear directly from learners increases awareness of the insightful thinking of children in ways not evident in traditional assessments. Questions raised in the process can then serve as invitations to learn and create together, to imagine and co-construct a new school environment democratically.

The evidence and discussion provided here is a call for many more efforts to imagine what we do not yet know while inventing new means of capturing and promoting students’ learning and examining adults’ understanding about that learning. Creating opportunities throughout an educational organization to deconstruct current schemata regarding schooling and schooling practices may open imaginations to new alternatives. As Rowling states, “We do not need magic to change the world, we carry all the power we need inside ourselves already: we have the power to imagine better” (p. 7).

Author’s Note on Research Methodology

The “applied qualitative research” of this study (Bogdan & Biklen, 1992, p. 199) was conducted largely for application in this one setting to advance the learning and development of the ideas in this one school. In this sense, the study is action research. The researcher and the school staff set out to be reflective, observant, and analytical of their own practice in order to learn from their work and make future adjustments in their thoughts and actions. Action research “is designed to bring about social change” (Bogdan et al., 1992, p. 223). The social change desired involved the development of the school’s assessment practices in order to enhance students’ learning and to invite community understanding of the school’s program and children’s learning processes. Action research was used in this setting to “expose the practice in order to change it” (p. 229). In this case, the research was used to make transparent and examine the various educational and political dimensions of an alternative assessment process.

One of the challenges in developing assessment and accountability processes is designing means that capture the complexity of student learning and the situations or programs that are to encourage this learning (Bransford et al. 2000; Pelligrino et al., 2001). The same challenge is true for capturing how this alternative assessment and accountability process was developed at the school in this study.

A case study is one means of capturing the complexity of a situation (Stake, 1995). It includes rich descriptions that engage the reader in a “vicarious experience of having been there” (Merriam, 2009, p. 258). Descriptions are provided less for the representation of truth and more for discovering meaning (Eisner, 1981). In this sense, readers are provided with “raw material” upon which to make their

own conclusions about the nature of the activity (Stake, 1995, p. 102). The researcher's task is not to convince, but to present a plausible argument (Bogdan et al., 1992, p. 190; van Manen, 1990, p. 65). This is similar to James Popham's (2001) suggestions to administrators for rethinking assessment and accountability, "...the administrator must assemble a solid array of accurate, convincing evidence culled from a variety of sources" (p. 142). Popham encourages school administrators to 'build a powerful case' much like Perry Mason as the renowned U.S. TV lawyer.

The goal here is to present a description of an alternative assessment process that engages the reader vicariously for the purposes of "open communication about education with the public" (Clark, 1990, p. 337). This can illuminate the complexity of the educational process and identify areas not previously considered by reformers and educators working to create more powerful and productive learning and assessment opportunities.

Researcher Role

In action research, the researcher is the primary instrument of data gathering (Stake, 1995, p. 29). This participant-observer role can vary from peripheral involvement to complete involvement in the activity being recorded and studied (Spradley, 1980, p. 58). The Adlers (1987) distinguish between an active member role and that of a complete member, "sharing a common set of experiences, feelings and goals" (p. 67). In this work, the author was a complete member, serving as the principal of the school at the time of the events and was intimately involved in the effort being reported and studied.

Data

The data for this study consisted of field notes taken by the researcher (principal), participants' collected remembrances (Bartlett, 1932) including notes and charts gathered during the planning sessions, and field notes from staff members engaged in this process. The notes and other documents focus on assessment events and focus-group discussions surrounding the development of the assessment process. They come from the school handbook, student debriefing interviews, family/community surveys, and school newsletters to the school community. These were used to present the process of development of the alternative assessment process and to construct the narrative of one of the assessment events, which is

presented here to illustrate what happened at the assessment events held at the school involved in this research.

The quality of evidence in qualitative research continues to be debated. Lincoln (2002 as cited in Freeman et al., 2007) developed standards of evidence for qualitative research. These standards can be used to assess the quality of the research presented here. First, researchers should be closely involved in the setting and action. The researcher here was intimately involved in the role of school principal as revealed previously. Second, there should be distance from the "phenomenon to permit recording action and interpretations free of the researcher's own stake." These data were reviewed and the analysis was conducted two years after the researcher moved from the school and community and no longer served in an administrative capacity in schools. Third, "claims should be based on an adequate selection of the total corpus of data." While much of the data is presented here to provide a context for the action research project, the specific event presented in the narrative came from one event of the many assessment activities that occurred at the school. This event was chosen for its revelation of the many competing tensions and possibilities in alternative assessment. The cognition, learning, and assessment literature was then used to formally analyze the significance of the process. This is presented in section III, *Going Public: Developing Common Conceptions*.

The fourth area Lincoln urges, is that the data partly come from "publicly accessible records." At the time of the project, some of the documents (School Handbook and newsletters) cited were publicly accessible through the school website, newsletters or school board minutes. The original documents remain in the researcher's database. The school has continued to develop and modify its work; however, a recent review of the school website reveals a strong relationship with what is presented in the public documents cited. Lastly, Lincoln states that the analysis of the data should include a description of "concrete phenomenon" as well as "inferences and interpretations" (Freeman, de Marrais, Preissle, Roulston, & St. Pierre, p. 28). How well this was done in the analysis and discussion section, is certainly a matter for the reader to conclude.

Timeline

This process took place over a period of two years with planning and pilot efforts conducted in the first year.

During the summer, the staff worked to formalize and document the components of the process for inclusion in the school handbook. The process was formally launched with the students and the school community in the fall of the second year. The event presented here took place mid-year of the second year.

About the Author

VIKI L. MONTERA is currently the Co-Director of the CANDEL joint doctoral program in Educational Leadership between Sonoma State and the University of California at Davis. She teaches courses on leadership and change; curriculum, instruction and assessment and educational politics and policy. Her research interests are curricular change, organizational reform, professional learning communities, teacher dialogue, and the development of democratic learning environments.

Email: vlmontera@sonoma.edu

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REFLECTIVE ESSAY

A Community College District Chancellor's View on Transformational Leadership

Francisco Rodriguez, PhD, Chancellor, Los Angeles Community College District

Editor's Note: Francisco Rodríguez was recently appointed as chancellor of the Los Angeles Community College District. Editors from the JTLPS interviewed Dr. Rodríguez on issues around leadership and transformative change in the twenty-first century. This is a themed transcript culled from an extensive interview with Chancellor Rodríguez.

Chancellor Rodríguez on his Vision for the Los Angeles Community College District

JTLPS: What is your vision for the district and how will you know when you have actualized it?

Rodríguez: My vision is in time to be leading the highest performing community college district, and I recognize it is going to take some time and effort to get there. Let's do an interview a year from now, and you can ask, "You said this a year ago, now what have you found?" or "You aspired to do these things, now what have you found to be the case?" And what is the state of the urban community college district? You have to be humble in this role and not be over-confident. Whether you are leading a smaller college, as I did at one time at Woodland Community College with 3,000 students, or the largest community college district, your style and approach has to have *corazón* (heart) driven by a sense of true authenticity. In

You have to be humble in this role and not be over-confident. Whether you are leading a smaller college, as I did at one time at Woodland Community College with 3,000 students, or the largest community college district, your style and approach has to have corazón (heart) driven by a sense of true authenticity.

two weeks, I am going to an event sponsored by the college foundation at Los Angeles Southwest College where the community is raising money for student scholarships and recognizing the 100th anniversary of the LA Chapter of the NAACP, the longest serving civil rights organization in the country. Our work as educators is not only about structure and vision of an organization, but it is also about emotion, conviction and *coraje* (courage) – that is, to understand that inequities still exist and that it is our job, as many did before us, to redress them.

Allow me to share a bit more about the vision that I have:

1. I would say I have an initial vision for when I get there to assess and strengthen the capacity of the organization, to support those who have invested their entire careers there, and to listen in an authentic and meaningful way. However, I do suspect that that vision will be enhanced, augmented and perhaps even reshaped because as a new member, I do not want to appear nor do I pretend to have all of the answers – I don't, but I have ideas. My vision includes raising the level of educational attainment by looking at rates of student success, particularly completers and the experiences that made them successful. How will we know if our students are achieving at the rate of the best community colleges in the nation? In part, we will know by looking at the metrics of student success at various junctures.
2. To have a faculty, staff, and administration that is representative of the diversity of the entire metropolitan region – at every level and not just representation at the custodial, food services, and clerical levels. We need to look at the presidents, vice presidents, deans

and senior professors at each of the nine campuses that make up the district. And if it's not there and there is a disparity, we need to peel back and push for an answer as to why, why aren't we attracting, hiring, retaining, and promoting candidates? And that could be a measure as to where you begin, and in turn, signal where you want to head.

3. We need to have an ethos that values inclusiveness, diversity and equity in a way that shapes and forms the campus climate and culture of the colleges and district. This is the qualitative piece. A lot of work has been done on "climate" and the chilly environment for women and people of color. It is important to assess campus climate and to ask such questions as, "Do you feel affirmed and respected here? Are there opportunities for advancement and promotion? If not, what are we missing?" It is important to assess the capacity. There are a lot of strengths in the district and I am inspired by the people who are there, by the sense of community, and by the identity and sense of place that exists. It's inspirational.
4. Where are the resources going and what are we investing in? Out of a \$1.1 billion operational annual budget at LACCD, let's say 80% plus is going to human resources fixed costs. So the question is how are we distributing these resources that allows for the growth and development of our most important assets – our people and students? We need to look at the attrition rates, at what actuarial studies say about retirees and leadership succession patterns. LACCD, with over 10,000 employees, could grow their own leadership academy and I am interested in exploring that. To have people vested to live in South Los Angeles and to be proud of being from Watts, East Los Angeles and West LA, and to have our colleges in the heart of those communities is very powerful. Our colleges are beacons of opportunity and centers of our community. So they are not just campus buildings, they are testaments to the future of what a person can be and can become.

Chancellor Rodríguez on his Role as Leader of the Largest Community College District in the US

JTLPS: As the leader of the largest community college district in the United States, how can you facilitate institutional change beyond consensus and the status quo and

encourage and support people to provide access beyond current expectations?

Rodríguez: Great question! Frankly, I am inspired by this challenge and I am terrified! This is the question of the 21st century as it relates to leadership. Let me answer it in the following way.

To promote institutional change you need the "Three C's" of Courage, Conviction, and *Coraje* (valor and boldness). This refers to the courage to lead and to facilitate conversations and speak out for social justice and equity and get people to follow their convictions and to redress the disparities. This is important because leadership is not done by an individual but by a movement of change agents and by those committed to morally just causes. Change requires persistence and you have to stick to it for the long haul. Best practices may not work right away and it may take a long time to germinate into systems that allow for change and improvement to occur. *Coraje* is tied to the notion that things aren't right and maintaining a sense of urgency. It's simply not right that there are a disproportionate number of people who are poor, in prison, and are the lowest-performing in our schools. To state it differently, it's unacceptable! You have to work with others who believe that, too.

Currently, if you look at the LACCD student profile, more than 70% of entering students need basic skills remediation. If you then disaggregate the data by gender, ethnicity, neighborhoods, socioeconomic status and zip code, this disparity and inequity exacerbates. More than 50% of the more than over 150,000 students served by the district are poor and 85% of them come from traditionally underserved and underrepresented communities.

To be a leader in such a diverse district is very attractive for me, as I am committed to the common and public good as an educator. I respect the tremendous challenge that lies ahead, but I am not daunted or dissuaded by it. It reminds me a bit of 9/11 when the brave firefighters were running into the burning buildings. We need people running in as educators to these districts that could stand to be improved, not out of them. I look forward to being engaged in dialogue with the district, the nine college presidents, the faculty and staff, and the governing board to foster a common vision and expectations for student access and success. And I am proud to be a part of that.

Chancellor Rodríguez on Success and Faculty

JTLPS: You mentioned urban community college districts in the nation could be doing better. Talk about how your leadership is going to take your district to a whole other level. How is your leadership an exemplary model for other districts to follow? What is going to get you there?

Rodríguez: I have long held that the best and most effective student retention and success strategy is to hire, train, and support excellent faculty. Persistence and success are fueled by great teaching and learning environ-

So we need to ask, why? Sometimes, we – consciously or unconsciously – look for a replication of models we are comfortable with, a profile or portrait that we recognize, instead of one that might be more inspirational and tenacious, perhaps even non-traditional. Excellence comes in many forms. We need to look not at who the person is today but who they can become with the support of the institution!

ments...punto! (period!) It doesn't matter what structure or system is in place if you don't have exemplary instruction going on. So, if we are not shaping, reshaping, and reimagining our teacher preparation programs and doctoral education programs, our leadership efforts for the 21st century in the United States will fail and fall way short of bridging the educational outcomes between high and low-performing students.

One of the most enjoyable things I have been able to do over the last 11-15 years is to recommend outstanding faculty to the board to hire. That process to attract, recruit, hire and then once those faculty are here to ensure they are nurtured and supported, and not just stay as they are today, is one of the most important activities of a senior leader. My role is to provide the space for faculty to grow, and to challenge and support them. Again, it is not who the faculty member is today, but who the faculty member can become with the support and encouragement of the institution.

If we don't hire teachers that understand the needs of our students we are serving, we are replicating sameness and actually exacerbating disadvantage. With the high number of faculty projected to retire soon, there will

be multiple job openings to fill. However, we cannot just expect the good ones to show up. You have to be intentional about it and say, "This is the profile and characteristics of the instructor we are looking for that would serve this district well." At the screening and interview table, you sometimes hear, "Oh, we just don't have a diversified pool of faculty for a particular position." But I believe the strong pool of candidates is out there; some are just not advanced to the next level and they are not always selected. So we need to ask, why? Sometimes, we – consciously or unconsciously – look for a replication of models we are comfortable with, a profile or portrait that we recognize, instead of one that might be more inspirational and tenacious, perhaps even non-traditional. Excellence comes in many forms. We need to look not at who the person is today but who they can become with the support of the institution!

Chancellor Rodríguez on Supportive Leadership

Rodríguez: Leadership is more than just being able to run a program or provide a service. It is my belief that the mark of an excellent leader is when you depart an organization, things continue to function well and continue to build on the foundation that you and others have helped to construct. Remember, leadership is not driven by an individual; it is a team effort. You may have charismatic, iconic leaders like César Chavez or Martin Luther King, but their true impact and legacy continues because the social or political movement embraced by the community is larger than any one individual.

LA has very distinct areas and neighborhoods, and an ethnic ethos that is palpable and powerful. So when speaking to the leaders of the various communities that make up the rich diversity of Los Angeles, I am going to need to understand the historical tenets of those communities and understand their leadership experiences with government, school systems, and society, in general.

Chancellor Rodríguez on Transformative Leadership

Rodríguez: I read once that to be a transformational leader you have to have both the skills of an analyst and those of a social architect. I believe this to be true and that the best leaders can do this while being activist-educators.

Come June 1, when I assume my new responsibilities, it will be the first time in my close to 30 years in California higher education that I will not be on a college or universi-

ty campus. I will now be located at a downtown district office and those who know me know I dig hanging out with students, so this is different for me. While I don't know how that is going to be just yet, I do know that the success of any leader is with and through others. So part of my job will be to understand the heart and motivation of the college presidents of the nine institutions, so that I can support them and support the governing board in their fiduciary responsibilities as elected officials. My job is to empower and nurture, to remove obstacles and barriers, and to provide the resources that can help their respective campuses be successful. I believe you lead people and manage things. It is not the other way around. You need to lead people through inspiration, example and provide them with support.

Chancellor Rodríguez on Resistance and Challenges

Rodríguez: The notion of being personally centered is important in leadership. You have to know what your own moral compass is and understand what guides you. In addition to strategic plan or fiscal plan, I believe you have to have an emotional plan, too, to stay grounded during times of resistance, because this is tough work. This is where ethics, courage, and finesse come into play. Resistance is always there. If you are personally centered you can deal with the personal attacks that may come with organizational change and leadership. Just remember that as long as your family loves and respects you, you are okay.

I have to manage my own expectations because I want change to occur and to occur now. I have a sense of urgency about these issues. Ideas and effective practice need time to germinate and become sustainable over time. Sometimes it's difficult to know if your leadership, practices and policies are working and getting traction. That's why the quantitative side is so important because you have to have some way of critically measuring progress at key junctures. You need metrics or performance standards. It is important to ask: Are the current policies in place actually and inadvertently producing dysfunction and disadvantage? A colleague of mine once shared that there is a difference between being happy and being successful and they are not always the same. You could be wholly successful, but if you are not happy, then it is not worth doing it.

Chancellor Rodríguez on the Intersegmentality of K-16 as a Continuum

Rodríguez: With over 40 cities that we serve in the region, there are multiple school districts that feed into the Los Angeles Community College District. Those students who are in kindergarten today are future community college, California State University, University of California students. So we have to look at this educational continuum through an intersegmental lens. There is promise around the new K-12 curricular standards of common core. Although this is not my area of expertise, I will be knowledgeable about what K-12 teachers are doing in their classrooms so that I can better understand the connections to our sector.

What is invigorating to me about my role as Chancellor is that it interfaces with the City of Los Angeles, the Los Angeles Unified School District, and the County of Los Angeles, amongst others. The region includes the University of California, several Cal State Universities, private universities, and multiple other political and social agencies. We all aim to support, empower, and assist people through education, public services and policy. As Chancellor, I am honored to be a part of this circle of education and public service.

I want the community to know that they have another person on their team who is invested in the urban core and success of Los Angeles. If people leave away from the urban core, I don't think it is good for the health and vitality, and the democratization of this country. So being a part of a major urban center and ensuring its success is critically important from many vantage points.

JTLPS: So, how are you connected as Chancellor to the K-12 system? How do you get the K-12 folks to see higher education in the same light?

Rodríguez: First and foremost, I am an educator, so hopefully that will provide some credibility with my K-12 colleagues. Everywhere I have been I make it my business to get to know the superintendents of the feeder school districts intimately. I become interested in the success of their schools, learn what their challenges are, and find opportunities to work collaboratively to resolve them. Through faculty and administrative collaboration, I'll seek structural opportunities to better understand and collaborate around curriculum, particularly in English, math and reading courses, because these are the "gateway" disciplines for students.

I expect functional partnerships to occur and a positive relationship to emerge in Los Angeles. The LA school district is so large they have regional superintendents. I have already met the superintendent from East Los Angeles at an event I attended recently and we had an immediate connection of common purpose. We did not need a formal introduction. As veteran educators, there were things that we knew that were unspoken. I was essentially told, "Welcome, brother, to the region and let's get started." I will connect with the other educators as well.

JTLPS: We know the University of California President Janet Napolitano has just created what they are calling a position that talks to a K-16 philosophy. It is about educating the individual because what happens in one sector impacts the other. We all have articulation agreements. We have our structures, our own curriculum, our own policies and they are very different across the system and it's a disservice to our students not to articulate across the K-16 spectrum. How do we bridge the gap all along the K-16 continuum?

Rodríguez: I couldn't agree with you more for the need for this. We need to have a mindset of intersegmentality and not just cooperation. We need a seamless, well-designed and articulated transition between K-12 and higher education.

But this is easier said than done. How do we institutionalize, in the best sense, and embed cooperation? What are the evaluation systems of both K-12 and colleges or universities that can help to incentivize this cooperative behavior? Currently, there is no systemic way to cross-pollinate between our systems. If it occurs, it occurs happenstance. We seem to be entrenched in parochial behavior to focus in our areas only and there seems to be no real way to shape the standards in play, only to comply. The systems we currently have seem to be an archaic structure, not one positioned for the twenty-first century, so something needs to change.

JTLPS: So how do you get administrators to convince our K-16 faculties to treat those gateway courses as promises and not as gatekeepers? How do you change the current paradigm so that the so called "gate keeping courses" become gateway courses? Ultimately what we are talking about is access. How do we foster and promote access?

Rodríguez: It is access, but it is also about success. In the 1960s, the California Master Plan for Higher Education was designed as a blueprint for every Californian to

be able to receive an affordable, high-quality education. It was a beautifully-imagined, three-tiered system of higher education that was the envy of the country. Back then, every Californian, irrespective of where they were located, would have access to a high quality public education. And at that time, the State of California funded seventy to eighty percent of the entire system. Now the University of California is funded by the State of California to the tune of about eight to ten percent. The funding for the Cal State Universities is more than that, but far less than what the system needs. The community colleges are also dependent on state funding, as is K-12. So while we have to be vigilant that public colleges and universities are reflective of the demography of California, the focus of education today is on success and completion rates.

It is important for K-12 to understand that their job is not done when their students graduate from the district in the same way that our responsibility does not begin when those students arrive at the community college or university. The fact is that many students won't leave their native areas to obtain a higher education. Seventy-five percent of African American and Latino students stay local and go to community colleges across the nation, so we have to work together to craft that collective vision between K-12 and higher education to provide access and success.

JTLPS: So what could educational leaders do to support this?

Rodríguez: Most of this can be done by providing incentives and redesigning and reimagining what merit is. Here in California at the university level, research, teaching and public service serve as the three pillars or columns for faculty merit. But these are not weighted equally and as a result faculty of color or progressive faculty who engage in a high amount of public service can be disadvantaged in the tenure and merit process because they don't divorce their craft from their work with the community. What is your merit incentive at the University of California or at the CSU? Teaching and public service is the least of its focus. Both the UC and CSU privilege research over teaching and public service and balancing them out would be better.

Administrators can recast and redesign the value system so that merit has a broader and more holistic view. It's not only about how many articles you published or how many books you have written. That's clearly important, too. But in addition to that, we need to look at the other

qualitative features that suggest who you are as a teacher, an academic scholar, and a practitioner. I can recall in my undergraduate years and at the University of California, we had exceptional faculty, academic leaders and activists, but when they got to the cusp of tenure they were gone. The merit system was not conducive to moving them forward. They were not advanced by their peers who were only interested in particular characteristics and narrowly-defined academic portfolios. And those were the people who were mentors and advisors to folks like us and that spoke out about social justice, sexism, homophobia and racism. Yet for some reason as brilliant as they were in the classroom, they weren't advanced to tenure. So part of addressing this dilemma is how you define and reward meritocracy into the system that is broader and more inclusive of teaching effectiveness and public service.

JTLPS: In a year we will ask you this same question: There is disproportionality in outcomes between the nine

It's not only about how many articles you published or how many books you have written. That is important too. But in addition to that, we need to look at the other qualitative features that suggest who you are as a teacher, an academic scholar and a practitioner. I can recall in my undergraduate years and at the University of California. We had exceptional faculty, academic leaders and activists, but when they got to the cusp of tenure they were gone.

community college campuses in your district. While there may be access, the outcomes as measured by transfer rates between groups are disproportional for certain ethnic groups. How will you grapple with this to provide a more meritocratic system that serves all students?

Rodríguez: I have been giving this vexing issue some thought and I suspect I will continue to do so throughout my tenure. I was talking to my son, Andres, recently about the achievement gap and he said, "Dad, it's not about achievement, it is about opportunity, because not everybody starts at the same place. So how can you expect the same outcomes to occur?" This is a wise observation from a young scholar. He's right – all people do not start at the same place. And what are the metrics you use to measure this? There is a disproportionate impact on those that are

poor, those that are first-generation, and those that are known as linguistic minorities. That's why data are important here. We need to disaggregate the student success data by looking at the zip code, gender, income and other demographic factors. We need to see where the real educational disparities are and you will see that the resources, or lack thereof, usually follow disproportionate engagement and outcomes.

Resources are not only money; it's about people, functional connections, and common purpose. One great resource is the CSU. The CSU is the largest provider of educational practitioners in the country and certainly in the state to urban schools. Intersegmental cooperation works best when faculty is talking and working with one another. Administrators can set the tone and structure the conversation, provide resources, and allow for professional development. Ultimately, however, it is going to be our faculty that produces the results. We need to incentivize good faculty behaviors around a common purpose and goal to raise student achievement and improve student outcomes.

About the Author

DR. FRANCISCO RODRÍGUEZ is the newly appointed Chancellor of the Los Angeles Community College District. He previously served as the superintendent/president of the MiraCosta Community College District in North San Diego County and president of Cosumnes River College in Sacramento. He is a first-generation college graduate.

Email: rodrigfc@email.laccd.edu

REFLECTIVE ESSAY

An Inner City Superintendent's View on Transformational Leadership

Ramona Bishop, EdD, Superintendent, Vallejo City Unified School District

Editor's Note: In Dr. Ramona Bishop's reflective essay, she intersperses quotes from long ago by Horace Mann, our first Secretary of Education, and ponders over factors that are transformative of schools and classrooms in K-12.

Education as the Great Equalizer

Education then, beyond all devices of human origin, is the great equalizer of the conditions of men, the balance of social machinery.

– Horace Mann, 1837

In the mid-nineteenth century, seeing universal public education as “the great equalizer,” Horace Mann, the first Secretary of Education, began to build what would become one of the first national educational systems in the world. Secretary Mann felt that education was the antidote to crime, poverty, violence and fraud. He established the first public normal school or teacher's college, fifty high schools, and numerous teacher institutes. He was also responsible for making the school year six months long. He believed that through education crime would decline sharply as would a host of moral vices like violence and fraud. In short, Mann felt there was no end to the social good which might be derived from a common school. He sought to replicate this notion of public schooling across the nation (Cremin, 1957).

As the Superintendent of the Vallejo City Unified School District, a K-12 district in Vallejo, California, and the most diverse city in the United States (Vallejo Times-Herald, July 11, 2013), I can attest to the fact that education transforms lives. I am convinced that Horace Mann would be proud to see that public education works to-

day. Though it works, its role as “the great equalizer” has yet to be realized. Still, highly skilled teachers, and school and district administrators, who have high expectations for all students in spite of their circumstances, and who take responsibility for the facilitation of student improvement, show that education can be the great equalizer. It is in these isolated places where we tend to find transformational leaders at work. These leaders stand out amongst their peers in that they serve the same students and they achieve better results: higher student achievement in advanced coursework, higher overall grade point averages, higher percentages of students passing exit exams, higher graduation rates, or some combination thereof. These leaders with the necessary will, vision, and skill-set are able to set up systems where all students improve. These leaders succeed in spite of the inequities that may exist in schools.

There are certain educational practices that challenge transformational leaders in making a difference in schools and classrooms. It is well-known that there are differences in support systems between low-funding and high-funding districts (Tyack, 1974). In cases where leaders work in a low-funding district there exists additional stresses and challenges when facilitating the successes of the schools they serve. For example, the phenomenon known as “the Matthew Effect,” identified by sociologist Robert K. Merton, appears to be at play in many educational systems. Based on the biblically authored principal that the “rich get richer and the poor get poorer,” when applied to schools, it explains why some subgroups of students consistently perform well and others do not. The verse from the Gospel of Matthew (13:12) posits that “for whosoever hath, to him shall be given, and he shall have more abundance: but

whosoever hath not, from him shall be taken away even that he hath." Sociologists observe that advantages tend to replicate the possibility of advantage, and in turn, disadvantage further impacts group attainment. The net outcome is that it ends up creating perpetual gaps between those with more and those with less (Rigney, 2010). Horace Mann's concept of public school as "the great equalizer" relies on educators being able to create systems that strategically interrupt this social phenomenon. A transformational leader is needed and can thus be defined as an interrupter of the status quo.

Successful Transformational Leaders

Let us not be content to wait and see what will happen, but give us the determination to make the right things happen.

- Mann, 1837

When remarking about the honor of having been portrayed by Denzel Washington in the "George McKenna Story" (TV movie, 1986), Dr. McKenna often states, "Why make a movie about me? My story should not be the exception." Because of historical patterns of failure in schools serving large percentages of students of color, transformational leaders such as Dr. McKenna are singled out as heroes. They are seen as outliers who are beating the odds in classrooms, schools and districts that have yet to normalize success for other similar student populations.

Only a few educational leaders can claim that they have interrupted the status quo in classrooms, schools or school systems like my friend Dr. McKenna. When they do, the filmmakers come calling with highly regarded actors such as Denzel Washington. There have been numerous movies like *Freedom Writers* (2007), *Stand and Deliver* (1988) and *Lean on Me* (1989) in which the protagonist is successful either teaching or leading a school and delivers results in "inner-city" schools. The truth is that more work is needed to account for the numerous untold stories of successful educators throughout our country. More work is to be done to ensure these stories tell tales of educators who are truly committed to educating all students.

Unfortunately, stories like that of Jaime Escalante, Erin Gruwell, Joe Clark and others, yet to be spotlighted as talented educators, are being muffled by stories where the leader has no choice but to be successful. While stories like that of Dr. Lorraine Monroe are inspiring and relevant,

her tale is a familiar one, one in which she creates a successful magnet for select students as opposed to a public school where all neighborhood students are invited to attend. Regrettably, it appears that the concept of education as the great equalizer is gradually being replaced with the notion that students must qualify or win a lottery to obtain a quality education.

As the newly hired principal of Bret Harte Elementary School in Sacramento, I was surprised to find when school started that, in addition to the bus that transported students from Oak Park to our school in the more affluent Curtis Park, there were also buses to take students to basic schools in the district (www.scusd.edu). Though the schools are tucked in the heart of Sacramento neighborhoods, they were not necessarily accessible to neighbor-

State and national reports tend to hold these and other basic schools as models based on their high performance, while not understanding the back story. It is important to understand that the entrance criteria is used to ensure that "good kids" get into the school and stay there.

hood students. In fact, these basic schools have entrance criteria and provisions for students to be released if they do not uphold agreed upon standards of performance, attendance, student behavior and parent involvement. As a neighborhood school, we accepted all students and were still successful in moving our school from a similar school's ranking of four to an eight.

As the proud principal of Bret Harte Elementary School, a school that was continually celebrated for making significant improvements in all areas of performance, I continued to find myself explaining to prospective parents why our scores were not comparable to the basic schools. State and national reports tend to hold these and other basic schools as models based on their high performance, while not understanding the back story. It is important to understand that the entrance criteria is used to ensure that "good kids" get into the school and stay there. In turn, students who do not perform according to basic school standards are transferred to other schools.

The notion of student body selection branded as "basic schools" in Sacramento City Schools takes different forms in other school districts. One example is the

selective school concept in Chicago Public Schools. As parents prepare their children for high school in Chicago, they receive information from the school district on their children's 7th grade iSAT scores as well as seventh grade final grades in reading, math, science and social studies. This information is used to determine the eligibility of programs into which students can apply, and whether they qualify for selective enrollment into magnet, military, career technical education or international baccalaureate. In addition, students who wish to enter a selective enrollment elementary or high school program must take and pass an additional academic exam (www.cps.edu).

The student body for selective enrollment high schools in Chicago is built on a complex tier system, with the goal of ensuring that students from all socio-economic backgrounds have opportunities for admissions into the best high schools. Thirty percent of the seats go to the highest performing applicants regardless of where they live in the city. In other words, students who do the best academically have the best chance of getting into one of the top six selective high schools in the city. These students tend to live in wealthier areas populated by highly educated residents. More specifically, in 2012-13, Lane Tech High School, a top-performing selective enrollment high school had 1000 seats. They took the top 300 of the highest performing students from across the city. They then took the top-scoring 175 students from each of the other tiers. Chicago Public Schools creates the tier map utilizing the city's census and geographic information. Students from the more affluent tier 4 score between 839 and 861, while students from the poorer Tier 1 areas had scores between 737 and 856 (<http://cpstiers.opencityapps.org/about.html>). The question is: What happens to the students who are left in the neighborhood school once the selection processes is complete for these selective high schools where test scores are a part of the consideration for admissions? What is the composition of the staff and what kinds of supports are in place to ensure that all children have an opportunity to learn and not only those with the highest test scores?

Transformational leaders must take the helm of schools and districts where there are no entrance criteria, no special assessment for admissions and no ability on the part of the administration to remove students for not adhering to certain policies. The central questions become: Where are the examples of leaders that have actualized

Horace Mann's dream? Where are the leaders who have the will and the skill to make a difference systemically, institutionally and socially?

Transformational Leadership

Be ashamed to die until you have won some victory for humanity.
- Mann, 1837

Perhaps due to the absence of predictable patterns of success in schools or school districts, researchers seem to be stuck in deficit modes of thinking as well, studying patterns of failure, diagnosing all possible contributing factors that serve historically underserved students. Of late, politicians and advocates for privatization and vouchers have utilized negative perceptions of public schools' ability to educate all children as evidence to support their efforts at creating more charters or give vouchers to parents seeking a "better education" for their children. The transformational leader in these sagas is the recent college graduate that has "chosen" to be a teacher or a principal in the "toughest neighborhoods." Their goal is to enhance underserved communities.

The charter school movement is just old enough for researchers to have determined that they are not the silver bullet or a panacea. The achievement gap persists in these schools as readily as it does in "regular" public schools (Au, 2011). There are schools, "charter" and "traditional public," that are breaking historical patterns of underachievement and there are schools of both kinds that have yet to achieve the desirable results. It is the case in Washington D.C. Public Schools that the charters are beginning to gain a competitive edge as far as student performance. Yet it appears that the fact that underperforming schools are closed when they do not perform well has helped the overall achievement levels in charter schools (www.credo.stanford.edu, 2013). The answer is creating systems with organizational synchronicity, as measured by their results over time, that focus on strong student-centered indicators of success. These indicators include attendance, student achievement, graduation rates and parent-community participation. This is the challenge before us, the venue through which a transformational leader enters.

As a leader, I have been described as a fastidious facilitator, an unselfish community-builder, a lover of people, an approachable intellect, and most-importantly, a

listener. The effective leader is best described in Good to Great as a Level 5 Leader, a humble driver who focuses on “getting the right people on the bus in the right seats” and maintaining a focus on results (Collins, 2001).

The elements of leadership Collins posits as essential for getting results are needed in the schools that have not had strong student outcomes. Schools that have institutionalized strong student outcomes tend to have some benefits that may be invisible to the layperson. The interested party may compare the school with strong student

As an educator who has enhanced student outcomes in urban classrooms, schools and districts, I have been accused of being rebellious, an “out-of-touch” dreamer and an outsider who just doesn’t understand “these kids”. My drive is fueled by the fact that I was educated in urban public schools and I have real examples of the system working for all students.

outcomes to those with poor outcomes based on enrollment criteria or lack thereof, zip code, free and reduced lunch count, percentages of students by NCLB subgroup, etc. When these comparisons are made, researchers are often stunned to find the achievement gap is more pervasive than imagined. Indeed, they find that the opportunity gaps in urban settings are persistent, generational and often steeped in institutional and bureaucratic mediocrity. The aforementioned Matthew Effect becomes more of a reality than we would ever like to believe.

For Education to Truly Become the Great Equalizer...

Education then, beyond all devices of human origin, is the great equalizer of the conditions of men, the balance of social machinery.

- Mann, 1837

The voice of all stakeholders matter in communities of wealth, and there is no alternative but to have high expectations of all students because their families are rightfully entitled to demand the best for their children. What if the same were true for those who need more of our care and concern? What if we did this for the poor, immigrant, speakers of other languages and other disenfranchised members of our society?

The parents in wealthy communities know how to navigate educational systems to get what they want from them. Specifically, through their informal communication networks they know who the best teachers are in the school and arrange for their children to have those teachers. Teachers and school administrators that do not have a good reputation often do not last long in wealthy schools or somehow get the classes filled with students who do not have active advocates. What if the same were true for those who need more of our care and concern?

When students from wealthy families fail, there are tutors and mentors assigned to them, whether through a community network or a private company. The students will receive the assistance they need to graduate and matriculate into postsecondary opportunities or other family-planned pathways. What if the same were true for students who need more of our care and concern?

The transformational leader is the one who creates the space for all children to have what children of privilege have. As an educator who has enhanced student outcomes in urban classrooms, schools and districts, I have been accused of being rebellious, an “out-of-touch” dreamer and an outsider who just doesn’t understand “these kids”. My drive is fueled by the fact that I was educated in urban public schools and I have real examples of the system working for all students. I know executives of major organizations, attorneys at law, entrepreneurs and other professionals who matriculated through the system and are doing quite well. I am also driven by constant reminders of students who were as intellectually capable as my professional friends and who were tragically underserved by the very system that served me so well. The needed transformational leaders is the one who goes beyond the talk of transformation and actualization and ignores others while they watch, shaking their heads, and point their finger in protest. Transformational leaders are visionaries that can see beyond our current circumstances and who still have hope for the future. I have seen and met many transformational leaders on their way up. They make it only so high before politics and timing pulls them down. The challenge is for us all to create the political space for transformational leaders to do their work so we can have more movies about excellent educators like George McKenna.

The fact is that there are teachers and leaders in our systems right now that can be tapped to transform our

schools. As superintendents and college presidents, we must be intentional about our efforts not only to tap those talented leaders but to support them as they take the reins. Because the transformational leaders are working to change the status quo, the employee will need strategic support and understanding from a supervising mentor who helps them as they navigate the politics associated with the change process. The careful selection, training, support and coaching of these leaders is what it will take to ensure that all children have great educational experiences. All our children deserve this!

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About the Author

DR. RAMONA BISHOP is the Superintendent of the Vallejo City Unified School District. Dr. Bishop has served as Superintendent since 2011 and since has led the district team on an aggressive reform agenda.

Email: rdbishop71@aol.com

Leadership Embracing American Indian Ways of Educating: Restoring Culturally Imbedded Practices while Building Pathways towards Student Success

Rose Borunda, Sacramento State University

Crystal Martinez-Alire, Enrolled Member of the Federally Recognized Miwok Tribe

ABSTRACT

American Indian cultural traditions and practices are presented for their merit in promoting student learning within the K-12 educational system. Specific culturally imbedded practices are provided as examples by which student learning can be enhanced while honoring First Nation's teaching and learning practices. Five developmental theorists noted in this concept paper speak to pedagogical practices

that are in alignment with American Indian cultural orientations and that support their inherent value for application in the classroom. This paper asserts that by valuing and promoting American Indian culture and practices in the K-12 curriculum, that the United States would make greater strides in not only affecting the achievement gap, but in taking steps toward equity and achieving social justice goals.

Educators in the K-12 classroom who seek to engage the minds and hearts of American Indian students should first consider this population's experience of public education and the history of Indians' traditions, values, and experience. Under the pretense that American Indian ways of educating were inferior, U.S. education policies directed that "education was presented to American Indians as a value system to be substituted for their traditions and as a mechanism to destroy traditional Native American ways" (Grinde, p. 29, 2004). This historically embedded devaluation and persistent attack on their worth have negatively impacted American Indian communities (Ball, 2004; Loewen, 1995; Ogbu and Simmons, 1998; Sanchez, 2007). The assumed inferiority of American Indians has perpetuated negative stereotypes and images to those who have come to call the United States their home. When children in

public schools learn about American Indians in textbooks, they are exposed to harmful perceptions "represented by distortion, omission, over-representation, romanticized portrayals, and tokenism" (Barclay, 1996; Caldwell-Wood & Mitten, 1992; Costo & Henry, 1970; Sanchez, 1996).

Countering this historically embedded legacy requires concerted effort in extricating the persistent devaluation, negative images, and practices from our curriculum and pedagogical practices. Furthermore, educators can reverse this toxic legacy by creating and implementing curriculum and pedagogical practices that not only respect American Indian culture, history and traditions but appreciates how this orientation may benefit all students in the classroom.

This conceptual paper offers several examples of American Indian cultural traditions and makes a call for

schools to be inclusive of curriculum and pedagogy that incorporates American Indian cultural values. These are offered as a starting point by which to consider alignment of curriculum with cultural practices and knowledge that would further engage American Indian students in our public schools.

Despite the disparagement of traditional American Indian value systems, there are developmental theorists (Crain, 2011; Erikson, 1959, 1963; Froebel, 1887; Hart, 1979; Montessori, 1948, 1966, 1969) who promote an educational philosophy that is in alignment with culturally grounded American Indian worldviews. In learning to value American Indian orientations and way of education, the common themes from these developmental theorists are discussed as their orientations underscore the value of not only how "children grow and learn on their own" but emphasize children's capacity for "inner growth and spontaneous learning" from an environmental perspective (Crain, 2011, p. 1).

The authors examine the psychological and cultural disconnect for American Indians in our current educational system, engaging the reader by describing the main elements of five developmental theorists and how they align with American Indian cultural values.

Psychological and Cultural Disconnect

The U.S. Department of Interior and the Bureau of Indian Affairs (BIA) estimate that there are 564 tribal entities that are recognized and are eligible for direct funding and services from the Bureau of Indian Affairs (BIA) by virtue of their status as Indian tribes (Department of the Interior, 2010). California alone has 112 federally recognized tribes and an overall Native American population of 1.9% (Humes, Jones, & Ramirez, 2011).

Most American Indian children attend public schools where disparities occur both at the K-12 and at the post-secondary levels. During the 2010-11 school year, there were 378,000 American Indian and Alaskan Native (AI/AN) students in the U.S. public school system, comprising 0.7% of the total public school population (Aud, Hussar, Johnson, Kena, & Roth, 2012). In comparison, during this same time period, there were 49,152 students in Bureau of Indian Education Schools (Bureau of Indian Education, 2011). The high school dropout rate for Native American students is alarming and in previous years has reflected a rate as high as 50% (Herring, 1992).

More recent research indicates that American Indian enrollment, retention, and graduation rates are lower than any other ethnic group (Harrington & Harrington, 2012). While estimates show some improvement for AI/AN having earned a high school diploma or equivalent, the figures still speak to their trailing behind their Euro-American counterparts by 12% (BIA, 2011). Also in 2008-2009, 40% of AI/AN students as compared to 33% of white students attended a school that did not meet adequate yearly progress (Ross, Kena, & Tahbun, 2012).

Between 2005 and 2011, the achievement gaps between AI/AN and non-AI/AN fourth graders and between AI/AN and non-AI/AN eighth graders did not change for reading, but widened in the subject of mathematics. The breakdown of figures in 2011 indicate that 66% of AI/AN students at grade four and 55% at grade eight performed at or above the basic level of mathematics; however, the overall percentages of students that advanced increased by 1% (Institute of Education Sciences, 2011). These persistent outcomes reflect significant disparities that need to be addressed within our educational system. Doing so, however, requires an awareness of the underlying historical factors that exacerbate the constant psychological tension for American Indians children in order to correct it.

Despite the fact that American Indians existed upon this land thousands of years before the United States existed, the U.S. education curriculum is remiss in recognizing their contributions to the development and identity of the United States. An example of specific content that should be included in the K-12 curriculum relates to the Iroquois Nation who demonstrated an early form of leadership directly related to the formation of a confederacy. In the years prior to the existence of the United States, "Franklin called on the delegates of the various English colonies to unite and emulate the Iroquois League, a call that was not heeded until the Constitution was written three decades later" (Weatherford, 1988, p. 136). Although major components of the Iroquois Nation's governmental structure and philosophy were emulated, borrowed, and adapted to create the United States' governmental system, the attribution is rarely noted. "The standard works regarding the United States Constitution and the Articles of Confederation do not credit the American Indians with having contributed to their origins" (Payne, 1996, p. 605).

This was one of the earliest developments of leadership and governance yet is not mentioned in K-12 curricu-

lum. In light of historical cultural invasion, the omission of First Nations history, culture, and contributions persists (Freire, 1995). The failure to recognize American Indians at all, underscores the psychological experience of American Indian students who are one of the subgroups most represented in the Achievement Gap (Institute of Education Sciences, 2011).

Other factors contributing to the cultural and academic difficulties among the American Indian students are described by Huffman and Ferguson (2007). The authors explored the communities' disposition towards education based on the historical trauma enacted upon the American Indians during the conquest and colonization of the people who first lived on the land now called the United States. Historically, the federal government, in the attempt to strip away Native cultures, created an educational system for American Indian children that included boarding schools which did not honor or value the child's culture, language, and traditions (Ball, 2004; Grinde, 2004; Huffman & Ferguson, 2007).

One of the reasons for the adverse psychological reaction to U.S. education is due, in part, to the boarding school experience in which American Indian children were forcibly removed from their homes. The teaching of American Indian languages was banned, their cultural context and style denigrated, and many schools outright disgraced and dismissed the Native community and their cultural beliefs (Robinson-Zanartu & Majel-Dixon, 1996). These experiences negatively impacted Native communities as the historical trauma still informs tribal communities' perceptions of mainstream education (Ogbu & Simmons, 1998). Additionally, many of the school personnel in the boarding schools were extreme in the mistreatment of children and denigration of their home culture. This, in turn, fomented a distrust of the educational system in which many American Indian families perceived education as harmful and as a place that did not allow Native students to feel valued or accepted (Grinde, 2004).

Developmental Theorists: Native Worldview Alignment

In order to better understand the value for adopting and implementing American Indian orientations we examine the frameworks promoted by the following developmental theorists whose orientations reflect an alignment with American Indian world view. The themes that

are derived from each of these developmental theorists are their emphasis of learning and being in relationship with nature as well as relationships with others. The value of "existing in the natural world" is referenced earlier in this paper as well as the value of collectivism. These are inherent values in traditional American Indian culture. The table is followed by an examination of the first listed theorist, Froebel, who focuses on the benefits of engaging children learning within the natural world.

Friedrich Froebel

Developmental theorists repeatedly emphasize the inclination and the benefits of children learning and engaging within our natural world. German Educator, Friedrich Froebel (1887) "believed that children had a desire to comprehend the extent and diversity of the world in order to better comprehend their own place within it" (Hart, 1979, p. 336). Froebel explores the need for "the harmony and unity of the natural world and a child's desire to grasp this unity in order to develop a sense of inner unity." In other words, connection to the natural world creates balance with oneself. This forces us as educators to ask: How does a child perceive the world and how would a child's natural inquisitiveness be heightened by a greater relationship to the natural world? Froebel intones that children develop a greater use of critical consciousness and thinking when the child relates to the world. This relationship, in turn, enhances the child's sense of self in the world while deriving value and worth from their conscious and acknowledged presence. The next theorist to be examined is Maria Montessori who also stressed the benefits for children to learn within natural settings.

Maria Montessori

Maria Montessori, an Italian physician and educator, is one of the most renowned developmental theorists whose teachings have produced a host of schools throughout the world. The curriculum she created to promote the innate learning capabilities of people was founded on exposure to learning environments attuned to four different developmental stages that she referred to as "planes of development" (Montessori, 1969). The curriculum design was intended to respond to internal characteristics that Montessori perceived to be universal. These characteristics include "Activity...Orientation...Exploration... and Manipulation (of the Environment)" (Montessori, 1966).

During the stage of development that encompasses ages 12 through 18, Montessori valued children's learning to occur in a manner that promoted their engagement with the environment. Subsequently, she called for schools serving this population to be situated in the country and close to nature.

Her observations of children just learning to walk and who are encouraged to explore and study nature have multiple levels of growth when allowed to foster this intimate engagement with their surroundings. Montessori offers from her observations of children in their earliest stages that "nature seems to fill a vital emotional need" (Montessori, 1948). While this theorist provided ample reason for vitality in learning that would fulfill the needs from a developmental perspective, she also observed that the direction taken in modern life "separates children from nature so thoroughly that their powers of observation and feelings of love for the world just wither away" (Crain, 2011, p. 86). As we examine the nature of learning that tends to take place in most public school settings, there is a tendency to not only confine the child within the restraint of four walls but a large scale movement is underway in which children's learning is being encouraged through the use of electronic mediums (Baskette & Fantz, 2013).

While there is no doubt that competence in computers, tablets, and other devices is vital for anyone living in and engaging in the global market and arena, foundational development and an appreciation for nature are neglected when children are denied access to the natural world. Montessori's observations of children's optimal learning conditions prompted her to "articulate ways in which contact with nature helps children develop, suggesting it increases children's powers of observation and gives them a sense of unity with the world" (Crain, 2011, p. 389). To this end, Montessori ensured that her schools made room for children to have access to nature. This is similar to American Indian culture in that nature was the first learning environment to teach tribal children. From those early teachings about the relationship to earth, children learned their responsibility of taking care of the planet. When referring to mother earth the relationship of connectedness is significant since a high value in Native culture is placed on the circle of life.

Heinz Werner

Children's optimal learning conditions are discussed by Austrian Psychologist Heinz Werner who poses the concept of eidetic imagery. This ability which is often found in children reflects a heightened ability to recall or reproduce visual images with vivid memory. Furthermore, children have an expansive capacity to perceive the natural world from a physiognomic orientation. This capacity reflects a reaction to the dynamic, emotional, and expressive qualities of the natural world that is generally applied to interpreting the emotions and behaviors of other human beings and animate objects. For children, however, their physiognomic abilities apply to the world, including that which is inanimate, as "full of life and emotion" (Crain, 2011, p. 102). A sense of relatedness with the earth, including stones, trees, land, etc. enhances one's personal connection to the world. This relatedness being an implicit value imbedded in traditional Native America culture in which the concept of interrelatedness with the world, animate and inanimate, stems from a physiognomic orientation. Subsequently, a sense of reciprocity with the world implies a stewardship: "When we show our respect for other living things, they respond with respect for us" (Arapaho Proverb, Cleary, p. 16).

Similarly, a physiognomic orientation also demystifies and endears us to the world in which we live. Children's eidetic capacity as well as their physiognomic orientations can be further enhanced rather than diminished by opportunities to engage with the world around them. This sense of familiarity with the world promotes a personalization that fosters stewardship and a pro environmental and ecological orientation. By developing children's innate capacities in these two areas, the vastness of our forests, oceans, lakes, valleys, and mountains may be viewed not so much as just a "resource" to conquer and exploit, but more so as limited and irreplaceable forms of life that deserve protection and respect. This sense of familiarity and personalization is conveyed in the following quote, "For the Lakota there was no wilderness. Nature was not dangerous but hospitable, not forbidding but friendly" (Luther Standing Bear, Lakota Sioux, Cleary, p. 17).

While Luther Standing Bear and Werner lived in different parts of the world and in different times, they both value a personalized relationship with nature so as to develop a sense of care which is then translated to one's relationship with all living things. In development of this

relationship the consistent theme of trusting children's innate capacity to grow and learn is only enhanced by access to nature. The following theorist who also explored the value of connectedness and interdependence is Erik Erikson. As a developmental theorist Erikson delineated various stages of life from birth to death while learning from his observations of child rearing practices of various Native American communities.

Erik Erikson

The Stages of Life that were defined from a psychoanalytic theory of development and created by Erik Erikson expands on concepts that allow us to further understand how the child encounters the social world in which they live. Erikson's research of Native American communities enabled him to make cross cultural comparisons. In particular, Erikson's observation that the United States "values emphasize independent achievement to such an extent that people become exclusively involved in themselves and their successes and neglect the responsibility of caring for others" (Erikson, 1959, p. 97). This sense of "care" would be reasonable to expect of people as they emerge into the 7th of the 8th stages delineated by Erikson which is Adulthood. However, in the 5th Stage, Puberty, which is when children are attempting to establish an identity, the innate need to develop their place in the world can create extreme behaviors that are not only exclusionary but cruel to others who are not like them. Here, perceptions of people are based upon a "worth" that lends itself to not only quantifying others but of fomenting the devaluation of humanity and a form of objectification.

One example of valuing others was observed when Erikson surmised that, in comparison to Euro-American culture, the Lakota culture raise their children with a "long and indulgent period of nursing" in which they seek to promote their children's capacity "to trust others and to become generous themselves" (Erikson, 1963, p. 134-140). This quality of relatedness with others is not encouraged in United States culture, where independence is highly valued and free mobility away from one's family and place of origin is encouraged. As adolescents are developmentally striving to find an identity in the larger social world, the cultures that promote connection, in all forms, provide value in how our children can learn to relate to one another and to the larger world. Erikson observed that "In the United States in particular, our values emphasize inde-

pendent achievement to such an extent that people can become too exclusively involved in themselves and their successes and neglect the responsibility of caring for others" (Crain, 2011, p. 294). This concept of relatedness and care for others is further expanded upon by theorist, Margaret Mahler. The last theorist to examine focuses on the sense of belonging and the child's learning environment.

Margaret Mahler

Hungarian by birth, Margaret Mahler espoused the position that children should have opportunities to develop "rootedness" with natural surroundings in order to promote a sense of belonging. With experiences that connect children to the environment, in its' most naturalistic setting, they can see themselves as part of something greater, outside of a social context, that enhances their sense of well-being. Subsequently, belonging in nature provides a place in which children can seek refuge for a budding ego that seeks validation, acceptance, and nurturing. The belonging that is derived from a oneness with nature was evident from studies in which children were observed in natural settings (Crain, 2011). Mahler's theme of "belonging" which is derived from a relationship with nature is in alignment with American Indian beliefs of respect for the natural world. It is important for all children to feel a sense of belonging, and when examining American Indian student success in the classroom, this becomes a more critical component. A curriculum that includes culture by respecting tribal communities allows for acceptance to a population that has been hurting for centuries.

All five of these theoretical frameworks provide a rationale for student learning that would be enhanced by aligning curriculum and pedagogy with American Indian orientations. In order to meet the needs of American Indian students, it would be ideal to understand their cultural background. Specific examples that could be instrumental in eliminating the cultural disconnect are offered as new approaches which need to be included in the K-12 educational curriculum. For this reason, we examine the benefits of integrating First Nation orientations within our mainstream curriculum and pedagogical practices which would enact restorative justice initiatives, so that the practices of storytelling and other culturally responsive pedagogy and curriculum would engage student interest in the classroom. The next section will further develop and explore the importance of American Indian storytelling

Table 1
Developmental Theorists

Theorists	Description	Cultural Ties to American Indian Orientations
Froebel	Harmony and unity to the natural world.	Enhances child sense of self in the world
Montessori	Curriculum designed to take place in the natural world.	Learning in nature produces greater learning outcomes
Werner	Enhancement of children’s perceptual capacities.	Relational capacities with the earth translates to relational capacities with humans and animals, building on relationships
Erikson	Disadvantage of extreme individualism.	Collectivism and Interdependence
Mahler	Sense of belonging derived from being in nature.	Oneness with nature

and how this could be a teaching technique for the classroom.

Including American Indian Cultural Practices in the K-12 Curriculum

Storytelling

A primary cultural practice significant to many American Indian tribes relates to early teachings and verbal histories handed down to each generation. Storytelling encapsulates this tradition and is a culturally imbedded practice familiar to American Indian students. This pedagogical approach has always been one significant way in which Native elders share life lessons with their children, while also modeling the value and art of communication.

Many of the lessons shared by elders affirm cultural values and traditions while also acknowledging the historical connectedness to the land. For example, hundreds of years ago ancestors of the Sierra Miwok found a flat meadow in the wooded foothills, near grinding holes used for acorns with distinct petroglyphs. This area known as Chaw-se Grinding Rock (State Park) is one example of tradition that forms a historical connection to the land (Eagle, 2008). Through the sharing of these stories, all children would feel connected and have a sense of related-

ness to the earth, stone, and trees which enhances ones connection to the world as conveyed by Werner’s recommendations for best practices for engaging children’s learning capacities.

Prior to colonial contact the bulk of education in American Indian cultures was communicated through oral story-telling, and was to be remembered, and passed on to the next generation (Grinde, 2004). Grinde indicates that:

Native Americans had educational systems long before 1492, with Native teachers and scholars imparting knowledge to children and adults on a day-to-day basis both before and after white contact. Elders as well as people knowledgeable about specific ideas and techniques instructed members of their societies about a broad range of topics including history, religion, arts and crafts, literature, geography, zoology, botany, medicine, law, political science, astronomy, soil science, and theater. Since American Indian models of instruction centered on oral tradition, Europeans often typified Native American education as “primitive,” defective, or nonexistent. (p. 25).

In contrast, the written form of communication is relatively recent. When speaking with elders and other members in the community they all share the same value when communicating about the importance of storytelling as it has played a vital role in passing down knowledge. Another important value inherent to Native culture is learning from and respecting elders. This mode of learning is already being utilized in Canada; community elders share their knowledge and wisdom in classroom teaching and learning. This is an example of cultural synthesis (Freire, 1995), the antithesis of cultural invasion, in that it not only embraces Indigenous orientations but is regarded along with Euro-western theory, research, and practice (Ball, 2004). These efforts provide a model for mainstream educators in the United States to discuss American Indian culture, and to also be inclusive of these traditions in their methods of instruction in the classroom setting.

Freire's banking method of education refers to the fact that students are not called upon for what they know, but rather are expected to memorize the contents narrated by the teacher (p. 80). This pedagogical approach inhibits creative thinking. Freire also refers to education as the practice of freedom and promotes the idea that students learn best when they are challenged and when content is interrelated so as to better understand the world (p. 81). One of the most significant approaches in understanding life's lessons is from prior experiences which is inherent with the use of storytelling. This form of teaching has been used by many Native tribes for centuries, and was an early form of sharing information which challenges student's thoughts and promotes creativity. Using storytelling as a method of transmitting localized knowledge enables students to be pro-active in problem solving as well as to develop their critical thinking skills. The use of this medium enhances student's ability to view all perspectives from a holistic orientation that promotes informed decision making. Storytelling, an early form of teaching, allows us to draw from lessons of the past and apply them to the present. The knowledge that is delivered through storytelling is stored in the "core mentalizing network (ToM)," which aids in the process in the recovery of information (Mar, 2011).

Sharing of Collaboration and Knowledge/Shared Vision

Another area of cultural tradition that should further be explored for its' added value is the importance of com-

munity in relation to the child and family. Generally, when there is a family or school issue it becomes a shared concern within the American Indian community. This is also a preferred approach towards leadership and decision making, and also relates to the area of collaboration as well as the integration of shared knowledge. "One foundational value, of leadership from the American Indian perspective, is a shared vision and responsibility. Although there may be individual or tribal differences among familiar groups, this perspective is a consistent cultural view" (Portman & Garrett, 2005, p. 284).

Many American Indian communities believe that unity is critical to the success of its people and students. Recognizing the history related to the mass destruction that much of the Native population encountered, would promote an understanding that American Indians survived by working collaboratively. Overcoming concerted efforts to annihilate an entire population called upon their resilience in the face of adversity. It is because of this shared purpose and vision for all to live in harmony, that tribes are still resilient today. Collaborating became essential for collective survival and when applied regressing to pedagogical practices, collaborative learning is a basic technique that can be valued and applied in the classroom. As offered by multiple researchers (Grinde, 2004; Ogbu & Simons, 1998) countering the negative perceptions of American Indian's requires exposure to American Indian forms of teaching. This entails utilizing Native tribal forms of collaborative teaching which exposes children to early forms of Native traditions in which elements of science, engineering, and math are evident. For example, the beadwork and the construction of the ceremonial dance house are both important aspects of tribal traditions. Through the course of life it was best to learn in natural settings and to teach each other within the community; as a member within the tribal community stated, "Nature is your true teacher" (Martinez-Alire, 2013). It is with this understanding that children and community members developed problem-solving skills.

Concluding Thoughts

The aforementioned developmental theorists have studied practices and learning contexts that enhance children's learning. The common themes point to an alignment with values inherent in traditional American Indian culture. Subsequently, the development of culturally responsive

curriculum and pedagogy would serve the dual purpose of enacting restorative justice initiatives while implementing curriculum and pedagogy that promotes greater learning outcomes for all children. Educational leaders who are willing to serve a community that has been marginalized after years of violent oppression must also seek to engage the scholarly community to enact transformative educational practices and policies. Standing on the foundation of American Indian orientations, supported by the recommendations of educational theorists, and moved by the need to create learning environments that promote the best in all children's outcomes is a goal that not only minimizes the Achievement Gap but one that promotes healing of our nation's historical violations.

Educators are positioned to transform the experience of "education" for all children by promoting inclusive curriculum and pedagogical practices that promote equity for all students. This entails acceptance and inclusion of tribal histories so that all students can feel validated in our classrooms. To this end we know that "Education is a strong value and is a source of future hope for Native children and communities. In sending children to public schools, American Indian communities have entrusted that future systems will respect the children they serve and that these systems must assume a new role in locating and contradicting the source of disrespect in order for students to feel accepted" (Robinson-Zanartu & Majel-Dixon, 1996). Once educators have forged partnership with American Indian communities and sought their input, they will have taken first steps in modeling respect for their culture. In doing so, the public school system will create conditions that will foster student success in the classroom which will lead to transformational change and outcomes within mainstream education.

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About the Authors

DR. ROSE BORUNDA is a professor in Counselor Education at CSU Sacramento. Her areas of research include social justice, equity and promoting counter narratives.

Email: rborunda@csus.edu

DR. CRYSTAL MARTINEZ-ALIRE currently works with a local Native American tribal program as an Education Coordinator. She is an enrolled member of a federally recognized tribe (Miwok).

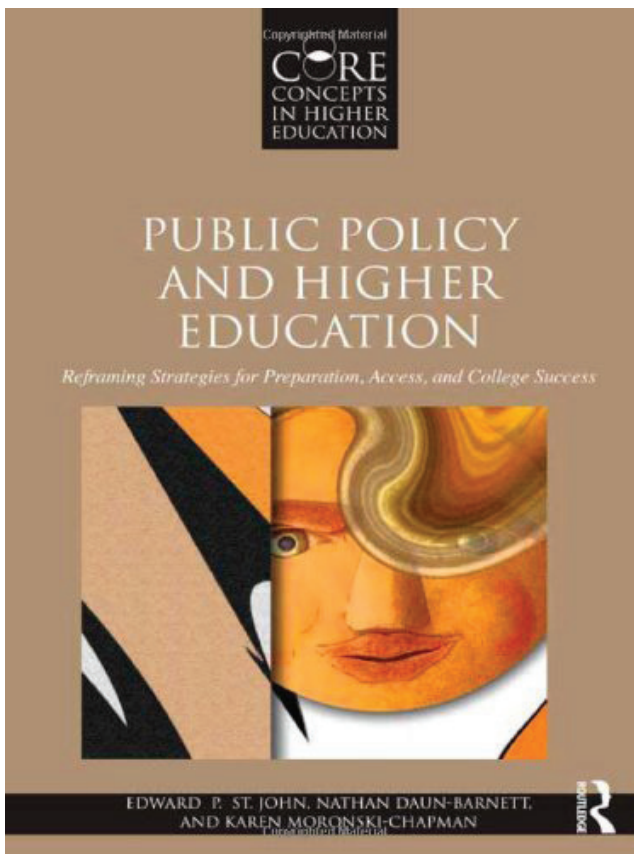
E-mail: crystalm57@hotmail.com

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BOOK REVIEW

Review by Lisa Romero, Sacramento State University



Public Policy and Higher Education: Reframing Strategies for Preparation, Access, and Success (Core Concepts in Higher Education)

by Edward P. St. John, Nathan Daun-Barnett and Karen M. Moronski-Chapman

Routledge, 348 pp.

ISBN 13: 978-0415893596

\$43.65

At few times in our nation's history has higher education faced the breadth of policy challenges that we see today. Edward St. John, Nathan Daun-Barnett, and Karen Moronski-Chapman (2013) provide an insightful and timely analysis of the sociopolitical environment facing, and shaping, higher education in *Public Policy and Higher Education: Reframing Strategies for Preparation, Access, and College Success*. The authors detail the profound shifts in political ideology, beginning in the 1980s and continuing today, that have impacted higher education and the implications for college preparation, access, success, and degree completion. The authors contrast the national, progressive framework that dominated 20th Century higher education policy with the current global, market-driven framework that dominates today. Whereas the progressive paradigm viewed education both as a social good and as important to economic development, the current paradigm views education as an individual good with individual choice and economic entrepreneurialism paramount (Harvey, 2005; Polyani, 2001; St. John, 2003). Using a policy frames approach and state case studies as archetypes, the authors argue compellingly that this "radical" shift in ideology and discourse implicitly breaks the social contract (Rawls, 1971) and has translated into federal and state policy with outcomes that have increased inequities in higher education.

Geared primarily to graduate students and scholars of public and higher education policy, this book can also be instructive for policy makers and useful for policy analysts concerned with the effects of policy on higher education outcomes. Additionally, it can serve as a resource for higher education activists and others seeking to understand the relationship between political ideology, policy decisions, and outcomes affecting college opportunity, access and success.

The book is divided into three sections. The first chapter introduces the reader to the central premise of the impact of changing sociopolitical ideology on higher education policy and outcomes, as well as providing an outline of the organization of the book. Part I (chapters 2 through 6) addresses "The National Policy Discourse" about higher education. Part II (chapters 7 through 12) provides case studies of six states: California, Minnesota, Florida, Indiana, Michigan and North Carolina. These case studies provide an evidence-based approach to illuminate how federal policy and finance influence state decision-making as states respond to federal incentives, pressures, and mandates. The case studies also make clear the importance of context and how state ideology and policy frameworks result in divergent higher education policy, and outcomes in each state. Finally, Part III (chapters 13 and 14) turns to "Reframing Strategies," and suggests ways to move forward and reincorporate notions of social uplift and equal opportunity in spite of the prevailing global economic, market-driven paradigm.

The first two chapters of Part I (Chapters 2 and 3) provide important historical context about the federal role in higher education policy, especially the federal funding of institutions and students. The authors describe the nature and repercussions of the shift in political ideology from social progressive values to contemporary neoliberal and neoconservative values. They explain, for example, how the switch from a "national progressive" framework to a "global corporatization" framework manifests itself in college access, affordability, and equity. Under the progressive framework, student tuition was subsidized by taxpayers through scholarships and grants. Under the global corporate framework, student loans have replaced student grants, effectively shifting the burden from broad and diffuse support by taxpayers to a heavier burden on students and their families. Chapters 4 thru 6 cover issues of preparation, access, and degree completion, respectively. Each of these chapters provides an overview of the policy discourse surrounding the topic, followed by a review of the research literature.

In Part II (Chapters 7 thru 12) the authors provide case studies of six states -- California, Minnesota, Florida, Indiana, Michigan, and North Carolina -- with a chapter devoted to each state. The case studies show the variety of state responses to growing federal involvement in education in the form of policy and financing. The chapters contextual-

ize state education policy at the collegiate level and importantly consider state secondary school policy that impacts higher education outcomes (i.e. requirements that students take upper level math or science classes in high school). The authors then evaluate each state based on trends and common outcome indicators, including measures of preparedness, completion and diversity.

The authors move from case studies back to a macro-view in the third and final section of the book (Chapters 13 and 14). Chapter 13 focuses on reframing policy decisions, drawing on social justice theory from Sen (2009). They also urge that higher education policy be evaluated based on outcomes rather than intention. Correspondingly, in Chapter 14 the focus turns to reframing the social good. Here St. John et al. argue for a new, broader understanding of the social good, incorporating a human capabilities approach proffered by Nussbaum (2011). The final chapters explore avenues to reframe higher education discourse and policy in order to reincorporate vital notions of social uplift, social good, and equal opportunity into the current global, corporate paradigm.

This book has much to recommend. It provides critical historical context, links prevailing sociopolitical ideologies to federal and state higher education policy, and ultimately to student outcomes. Where some studies of public policy read like a chronological laundry list of legislation and court cases, St. John and his colleagues provide a strong theoretical framework that makes sense out of what we are seeing. It provides an accurate and much needed critique of the prevailing market model, and its consequences -- intended and unintended -- for higher education outcomes, students, their families, taxpayers and the greater social good. More specifically, they point to the growing inequities in higher education that have stratified the academic community, both racially and economically. The result is that community colleges and less prestigious four-year universities serve students of color and those with limited economic resources, while the more prestigious four-year universities serve a more elite, predominantly white and Asian, population.

Another strong aspect of this book is its purposeful consideration of K-12 state policy. The authors make clear the incontrovertible link that quality secondary education and policies such as graduation requirements have on higher education issues such as student preparedness, equal opportunity and postsecondary success. The au-

thors are to be commended on their union of state higher education policy with secondary policy. It is a refreshing and much needed break from the siloed world in which educational scholars, policy-makers, and practitioners typically dwell. As the authors clearly show, outcomes are not neatly siloed, and K-12 policy has important implications for higher education, and for students and families with plans and aspirations for their children.

The authors also present a useful array of indicators that can be used to quantify the effects of higher education policy. Using nationally available data, the authors constructed indicators of high school preparation for college, continuation and completion rates at both two-year and four-year institutions, and equally important, student diversity. These indicators make it possible to assess policy outcomes and examine the effects of new policies, as well as compare outcomes across states. An appendix documents how these indicators are calculated, making it possible for students, scholars, or concerned policymakers to evaluate their own states. Although this book offers much to recommend, it could benefit from a more thorough editing and vetting process. For instance, within the discussion of "Current Issues in California," the authors offer a critique of the California DREAM Act that is misleading. In analyzing the legislation, the State of California is criticized for not providing a path to citizenship. The authors write:

In 2002, the state legislature passed a version of the federal DREAM Act that provided access to in-state tuition at the California State University (CSU) and the California Community College (CCC) systems. *It did not, however, go as far as to provide undocumented students a path to citizenship, which was the language proposed at the federal level.* (p. 148, italics added)

This assertion is repeated in the following paragraph:

California's commitment to the DREAM Act is consistent with its liberal approach to college access and opportunity. However, failure to open state financial aid to undocumented students and *the omission of a legal path to citizenship* are both notable limitations. (p. 148, italics added)

While surely the authors are aware that citizenship is granted by the federal government and not under the purview of states, students and other readers may not be so sure. Additionally, it leaves one wondering what else the authors might have gotten wrong.

Overall, St. John, Daun-Barnett and Moronski-Chapman provide a compelling and well documented argument about changes in higher education that currently have, and will continue to have, consequences for our nation. Notably the book provides a needed bridge between K-12 policy and higher education outcomes. The case studies also add value by providing context, making clear the variance in state higher education policy, and also by providing outcome indicators based on publicly available data. In spite of its occasional lapse, the book adds value to the literature on higher education policy. Increasing stratification cannot be a long-term benefit for a diverse nation that preaches opportunity for all and that relies on an educated citizenry to be competitive in the world.

Further Reading

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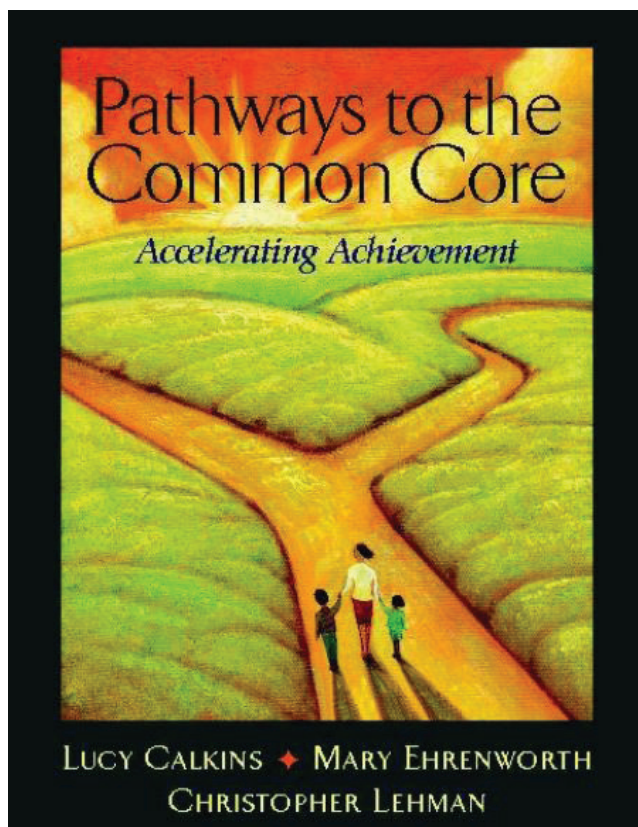
About the Reviewer

LISA ROMERO is an Assistant Professor in the Doctorate Program in Educational Leadership at CSU Sacramento. Her research interest is in educational administration and leadership, and educational policy.

Email: lisa.romero@csus.edu

BOOK REVIEW

Review by Bryan Rogers, James C. Enochs High School, Modesto, California



*Pathways to the Common Core:
Accelerating Achievement*

by Lucy Calkins, Marh Ehrenworth and
Christopher Lehman

Routledge, 224 pp.

ISBN 13: 978-0325043555

\$33.13

In her book, *Pathways to the Common Core: Accelerating Achievement*, (Calkins, Ehrenworth, & Lehman, 2012) Lucy Calkins presents an overview of the possible arguments both for and against the new Common Core State Standards (CCSS). The prose of the introduction and discussion is lighthearted and persuasive towards viewing the CCSS as a golden opportunity, encouraging the reader to view them as a chance to rebuild and retool education modes and assessment means. The author is clear in her acknowledgement that while we may see the great opportunity of the CCSS; how it will be implemented is still an unwritten chapter in the book of modern education reform.

The adoption of the Common Core State Standards in 45 states across the nation, including the District of Columbia and four American territories, represents a large scale change in curriculum and assessment goals aimed at better preparing America's K-12 students for success in college and careers (National Governors Association, 2012). The new mandates require an increase in literacy skills for all students K-12 in every academic discipline. The guidelines of the Common Core State Standards indicate students will be assessed using adaptive testing on an open-ended response style of questioning that measures literacy mastery and the ability to explain the "correctness" of their responses on multiple topics. Students who have previously been trained and assessed on their ability to look for the best-fit answer and make educated choices will soon face a testing environment that does not match the way they have been taught or assessed previously.

This translates into a requirement for the students to adapt to new modes of content delivery, assessment, and

very likely, a completely different learning experience in a fully implemented CCSS classroom. Similarly, it is a clear change in the working environment and charges teachers to produce deeper lessons for students, with higher expectations of performance specifically connected to literacy mastery. According to Calkins, Ehrenworth, and Lehman (2012), "...the Common Core marks a return to the kind of reading that was promoted in the thirties and forties through New Criticism. New Criticism put text at the center and equated reading with close analysis of the text" (p. 26).

The main focus of the book is on the theory and implications of three parts of the CCSS: reading standards, writing standards, and speaking and listening standards. In each of the sections the authors break down the standards and painstakingly illuminate the connections within and between the standards, as well as how each standard stacks upon the previous school years in a threaded fashion. The text in each of these sections is descriptive and at times repetitive with commentary regarding resources that can be obtained from the authors' company. In a few areas, the author seemed to be more interested in describing the difficulty only to follow up with their company's answer for how to approach the challenges of implementation.

The book is strong on explaining the relationships and rationales of each of the three standard areas discussed. The structure of each of these areas is well defined for interrelation and theory. The goal of reading for meaning and how to blend that concept into writing for meaning are developed in each section and at times the connections are very clear. They cite the research on "close reading" as a means to help students engage in the lessons for intrinsic reasons, which is common in current CCSS training sessions. The examples in the reading sections using the book *Charlotte's Web* are very good but limited to certain grade levels.

The narrative mentions a limited number of possible methods to actually apply the standards to a classroom setting and the examples that are presented are from the elementary school level. There were very few discussion pieces that give mention to high school level implementation suggestions. The implementations suggested also come from a perspective that the educator reading the book is most certainly working with a group of other teachers in collaboration. The assumption of a profession-

al learning group or team working on implementation using the book as a guide comes across as a hidden message that the task is too big for one teacher with one group of students. It would be wonderful if teamwork and consistent collaboration was the norm at every school site, but I would argue the authors' perspective on this is not a universal truth.

The authors make multiple references to purchasing new books and materials for students to read but this seems in opposition to the reality of current school budgets and the very real concern of the costs of implementing the standards and assessment pieces that they briefly cover in the introduction. In addition, the depth of study required for implementing text, reading, and speaking analysis as they suggest would be problematic with the current hours of school required for attendance, which is a largely unaddressed concern in their narrative.

The primary weakness in the book is the lack of connection between the literacy strand and all of the academic disciplines. Reading, writing, and speaking, while very important skills, are not the only academic topics covered in school and by leaving out the other disciplines in this book the authors may have missed a key area of practical need for educators.

The book concludes with a very useful and thorough discussion of the two consortia that are developing Common Core assessments, the Smarter Balance Assessment Consortium (SBAC) and the Partnership for Assessment of Readiness for College and Careers (PARCC). The explanations of philosophy and the different style of assessment to be offered by each of these groups is well written and are quite valuable resources to address concerns about the new assessment model.

In summary, *Pathways to the Common Core: Accelerating Achievement* provides a solid discussion of the theory behind the Reading, Writing, and Speaking and Listening standards. The narrative is incomplete, as it does not connect to literacy standards across all disciplines, such as mathematics, science, and social science. Educators in the elementary and 7-12 English Language Arts will find the detailed theoretical breakdowns of the standards useful in understanding the purposes, but will still be left with the question of how to implement the standards fully. The case for collaboration to address this change is assumed, but nevertheless represents what may be the only possible way for full implementation to work. Although this

book would be a good source for starting the conversation about implementation and how to adapt to CCSS instruction, it represents only one part of the story to be told in this new era of education reform.

Further Reading

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National Governors Association (2012). *Common core state standards initiative: Preparing America's students for college and career*. Washington, DC: National Governors Association.

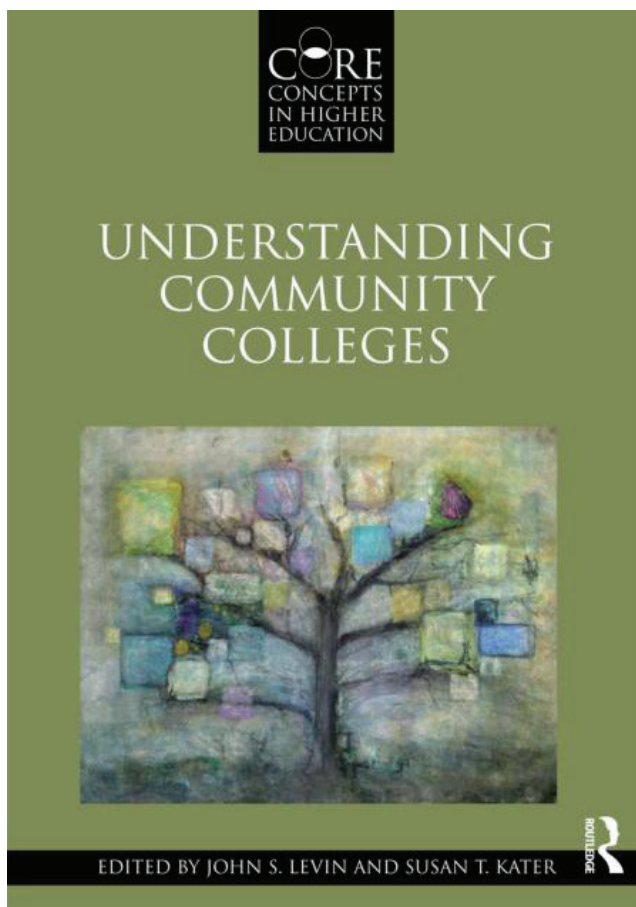
About the Reviewer

BRYAN ROGERS is a veteran educator and currently teaches Algebra and U.S. History in Modesto, CA. He is a doctoral student in Educational leadership at CSU Stanislaus.

Email: brogers1@csustan.edu

BOOK REVIEW

Review by Sarah M. Graham, Live Oak Unified School District and the University of San Francisco
and Brandon J. Jouganatos, National University



Understanding Community Colleges

edited by John S. Levin and Susan T. Kater

Routledge, 2012, 288 pp.

ISBN 13: 978-0-415-88127-2

\$48.95

A greater understanding of community college dynamics is vital in order for emerging leaders to make effective decisions. Understanding both operational and structural functions allows leaders to make decisions that are reflective of the past and focus on the future. *Understanding Community Colleges*, edited by John S. Levin and Susan T. Kater, provides a comprehensive overview of the history of community colleges and gives insight to meeting their mission. The various authors of this edited book provide suggestions for improving access for students and recognize that in order to influence the diverse populations they serve, instructors must be aware of how to teach the skills needed in a way that meet the needs of diverse learners. *Understanding Community Colleges* provides a comprehensive look into the theories that leaders utilize in their practice, the financial background of the business and proffers suggestions for community college leaders.

This book tenders a relevant and fundamental collection of theories and practice on a series of important topics within community colleges. It provides a comprehensive analysis from a critical and theoretical perspective of scholarly research that sets a precedent for future scholarship in related fields. Although timely, the need for more analysis in these areas is overdue, as political, social and fiscal issues have emerged within colleges. In light of these factors, the text uniquely reviews topics including student success, diversity, leadership, and governance.

Given this, the book was reviewed using what is known as a transformational leadership lens to evaluate the applicability of these topics to the emerging needs of community college leaders and scholars interested in this topic. Transformational leadership is a collaborative style of management that empowers individuals within the or-

ganization in such a way that they often give more than what is required of them. Transformational leaders lead by example and exemplify the value and expectations that they seek from their employees (Kuhnert & Lewis, 1987). Utilizing this lens to review the book will provide a unique look into whether it applies such a practice to theory and vice versa.

As reviewers, we realize there are numerous leadership styles (e.g. transitional, authoritarian, and transactional), the transformational leadership lens was strategically chosen due to the impact such a style can have for emerging college leaders making institutional changes. As Nevarez and Wood (2010) state, "The need to prepare a new kind of community college leader is of the utmost importance, as the roles and duties of community college leaders have changed greatly from previous generations" (p. vii). We have selected four of the fifteen chapters of the book to review using this lens. These chapters were chosen as they provide vital issues for effective educational leadership and they directly correlate to the American Association of Community College's core competencies for community college leaders (American Association of Community Colleges, 2005).

Chapter Synthesis

Chapter 2, *Student Diversity in Community Colleges* by Lindsey E. Malcom, examines the trends and challenges associated with diverse student populations among community colleges. Malcom highlights social, economic, and policy factors that create a wide range of student populations with varied levels of academic preparation and educational goals, which ultimately challenge community college leaders, faculty, and staff. A theoretical framework is presented to explicate the pathways associated with different student populations and their relationship to contextual factors impacting community college enrollment. Furthermore, an emphasis is placed on diversity and equity, which further analyzes the need to consider past and present outcomes of the various diverse student populations citing issues of access and historical "risk factors."

Next, Chapter 6, *Teaching Academically Underprepared Students in Community Colleges* by Dolores Perin, reviews the characteristics of academically underprepared students, discusses various ways community colleges currently support these students, and concludes with two strategies leaders can consider when organizing a college

wide approach to services. Community college leaders looking for best structural tactics to incorporate in order to benefit academically underprepared students will find approaches that can be implemented effectively if done in a systematic and collective manner. From an instructional view, Perin (2013) explains in great detail the issue of "contextualization" and describes it as a student-centered approach to teaching. Finally, suggestions are provided for implementing the strategies given to support underprepared students.

In turn, Chapter 9, *Leadership: Community College Transitions* by Marilyn J. Amey, delivers a synopsis of various leadership styles and informs the audience of significant effective and ineffective characteristics of the approaches discussed. Amey posits the need for community college leaders to be reflective of one's own beliefs, one's leadership style, and the culture of the college. Multiple theory-based suggestions are offered for consideration in respect to hiring leaders, training future leaders, and developing a leadership style. In addition, information is provided on how current leadership must vary from past leadership styles due to the current diverse functions of community colleges.

Finally, Chapter 10, *Deconstructing Governance and Expectations for the Community Colleges* by Carrie B. Kisker and Susan T. Kater, discusses the literature related to community college governance. The chapter begins with an explanation of the approaches community college leaders have taken in the past. Kisker and Kater provide greater specificity on the various styles of governance and the stakeholders who are involved within each model. Yet, they recommend that scholars explore more recent governance styles which are more conducive to modern community college environments. Specific attention is given to Federal Systems, Unified Systems, Confederate Systems, Confederated Institutions, and P-16 systems; each is explained with relevant examples of application and discussion as to how the systems affect the college stakeholders. Kisker and Kater conclude with a more recent theoretical explanation pertaining to how and why the governance of a college affects its ability to achieve its objectives.

Significance of measurement

The authors of *Understanding Community Colleges* offer discussion questions at the end of each chapter as

Table 1
Transformational Leadership Matrix: Degree of Focus

Sampled Chapters	Primary	Secondary	Absent
Chapter 2 <i>Student Diversity in Community Colleges</i>	- Utilize Theory - Informed through practice - Support - Inspire	- Innovative - Empower	- Intrinsically motivate
Chapter 6 <i>Teaching Academically Underprepared Students in Community Colleges</i>	- Utilize Theory - Informed through practice	- Innovative - Empower - Inspire - Support	- Intrinsically motivate
Chapter 9 <i>Leadership: Community College Transitions</i>	- Utilize Theory - Informed through practice - Innovative	- Empower - Intrinsically motivate - Support	- Inspire
Chapter 10 <i>Deconstructing Governance and Expectations for the Community Colleges</i>	- Utilize Theory - Informed through practice - Inspire	- Innovative - Empower - Intrinsically motivate	- Support

their approach to the practical application of their book. To evaluate each chapter and the questions found at the end of each of the selected chapters, we used the following matrix to analyze whether the attributes associated with transformational leadership were applied.

The matrix evaluates whether each of the selected chapters' questions bring forth discussion involving the seven attributes that are consistently used to describe a transformational leader (Bolman & Deal, 2008; Nevarez & Wood, 2012; Kuhnert & Lewis, 1987; Kotter, 2007). The attributes are: empowers, intrinsically motivates, inspires, supports, innovates, utilizes theory and informs through practice. We classify each attribute as either primary, secondary or absent in the discussion questions for each chapter. Primary suggests the attribute is one of the primary focuses of the discussion. Secondary proposes that

the attribute is secondary in the discussion. And finally, absent indicates the attribute is not visible within the discussion at all.

Critical Analysis

The findings from the matrix suggest the authors of the selected chapters do a thorough job providing questions that invoke both the utilization of theory and informed through practice attributes. Both attributes of a transformational leader were primary focuses of the discussion questions in all 4 chapters analyzed. Theory being a primary focus in all 4 chapters contributes to the book's structure because the book supports differentiated models of practice throughout. However, being informed through practice is not covered significantly and there are few examples in the chapters we reviewed. We found the

authors included 6 of the 7 attributes in each chapter's discussion questions as either a primary or secondary focus. Having included 6 of the 7 attributes ensures emerging leaders receive some exposure to transformational leadership.

In light of the emerging demand for well-equipped educational leaders with a greater understanding of community colleges, the need to balance the historical and theoretical contexts with practical and dynamic applications of transformational leadership would strengthen the book's intent to "motivate future scholars to continue the comprehensive, critical, and empirical study of community colleges..." (Meier et al., 2013, p. vii). Specifically, the inclusion of relevant case studies from practitioners such as chancellors, presidents, and vice presidents would introduce progressive models and other strategies (See, for example, the Transformational Leadership Inventory by Nevarez, Wood, & Penrose, 2013). We believe such components would enhance the richness of this book.

Synopsis

As educational leaders at all levels face unprecedented institutional issues both internally and externally, a greater understanding of U.S. community colleges is essential. Future leaders require a comprehensive review of historical and theoretical contexts to support emerging issues amongst community colleges. Equally as important, the profession of educational administration and leadership has become multifaceted and places a heavy emphasis on student success. Other issues come into play such as politics, community college missions, governance, leadership theories/models, and praxis. As stated by Nevarez and Wood (2013), given the multiplicity of issues, a greater need to develop the analytical thinking and problem-solving skills of educational leaders is needed. *Understanding Community Colleges* provides this analytical lens.

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About the Authors

SARAH M. GRAHAM is Curriculum, Instructional Programs, and Assessment coordinator for Live Oak Unified School District and Adjunct Professor at University of San Francisco. Her areas of interest include second language acquisition, K-12 to college transition, and teacher preparation.

Email: sgraham@lousd.k12.ca.us

BRANDON J. JOUGANATOS is Associate Vice President at National University. His areas of interest include financial literacy, educational leadership, STEM (science, technology, engineering and mathematics), adult learners and reform in higher education.

Email: bjouganatos@nu.edu

Factors Promoting Inclusion and Success for Underrepresented High School Students in STEM

Randy A. Kilmartin, California State University, Sacramento

Katrina K. Pimentel, California State University, Sacramento

ABSTRACT

The focus of this study was to ascertain the best practices and policies for school leaders in recruiting, supporting, and retaining underrepresented students in Science, Technology, Engineering and Mathematic (STEM) courses while encouraging STEM related career fields. This report synthesizes empirical research at two comprehensive high schools in Northern California funded through a CSU Doctoral Research Fellowship. The policy implications from this study are central to promoting ac-

cess and inclusion in STEM education and future career pathways. Schools need to market and advertise their STEM programs and begin recruiting within their school, particularly at the middle school level. It was clear from this research that the initial "curiosity" that is promoted by the STEM curriculum needs to be fostered so that students continue to be interested in STEM once they get to high school.

Editor's Note: This research was conducted through a California State University (CSU) STEM doctoral research fellowship. STEM, as a paradigm, focuses on the integration of the related fields of Science, Technology, Engineering and Mathematics.

Meeting the challenges and fulfilling the promises of integrating STEM programs within diverse student populations are central to a democratic and equitable society in our new marketplace (State of the Union Address, 2011). The 21st century poses to be the century where technology and innovation lie at the fore of transformational change in a globalized marketplace. Schooling also has to embrace this focus. In a clear sense, Science, Technology, Engineering and Math or STEM has become the beacon for this change in educational settings, a change that must permeate K-12 and higher education. A corresponding challenge in our urban schools is providing ac-

cess and inclusion to underrepresented students, which includes racial and ethnic minorities and women, particularly as it relates to STEM. The factors which correlate to degree completion and STEM career success have been researched and agreed upon by many in the emerging STEM fields. These factors range from what has been called instrumental aspects of schooling such as access to technology and instructional materials to other aspects that are known as expressivist and include issues that are more pedagogical in nature. As with other aspects of schooling, leadership can influence minority students and women in STEM career fields and has yet to be investigated in depth to determine best practices and school policies that promote access and inclusion. This report synthesizes empirical research at two comprehensive high schools in Northern California. This report summarizes the factors that promote access and inclusion for underrepresented students in STEM.

A big movement nationwide is to incorporate a "Pathway to Engineering" curriculum. This curriculum has been piloted and industry supported to be incorporated into middle and high schools to assist with closing the achievement gap for all students, but especially for underrepresented students. One such curriculum is the coursework entitled "Project Lead the Way" (PLTW). This curriculum is the pathway into an engineering paradigm shift in schools and provides the experience needed to be successful in a college engineering program. By incorporating relevant project-based, hands-on and communication strategies from design to implementation of a resolution of a problem for the 21st century worker, students enrolled in PLTW "are introduced to the scope, rigor and discipline of engineering, technology and biomedical sciences and provided with a foundation and proven path to college and career success in STEM-related fields" (Planting the Seeds for a Diverse US STEM Pipeline, 2010, p. 64). PLTW teachers are highly motivated and are mandated to seek certification and recruit local practicing subject matter engineers to mentor PLTW students. All PLTW teachers receive intense training in their certification courses. They do every assignment and project that students will be expected to complete, allowing them to know the curriculum well and eliminate non-critical items if time is a factor in the school year. PLTW students pursue coursework projects from project identification through completion with justification presentation to the industry mentor. In addition, this curriculum supports the state's transition to the Common Core State Standards for the oral and written communications portion of English Language Arts, the Career and Technical Education portion, as well as math and science yet to be finalized in the application of these core subjects, and will assist in preparing all students to be college and career ready. In turn, the PLTW curriculum can assist our state and nation to meet the needs of the global economy by filling highly skilled positions with qualified workers. It also supports traditionally underrepresented students in STEM and affords them both access and inclusion as they pursue STEM programs at the college level.

The Nature of the Study

Given the current economic trends in our globalized economy, competition for jobs in STEM fields has intensified as the global market will find those who are already trained and available at a cost that makes corporate eco-

nomically sense. STEM has become a hybrid or composite of knowledge, skill and disposition that permeates across each of the respective fields of math, science, engineering or technology. This requires a new curriculum that embeds these discrete areas of knowledge into a composite. As an emerging discipline, STEM is grounded in the traditional disciplines of science and math and creates a disciplinary hybrid that caters to the needs of our emerging new technologies.

The focus of this study seeks to ascertain the best practices and policies for school leaders in recruiting, supporting, and retaining underrepresented students in STEM courses while encouraging STEM related career fields. Several questions were asked in this study. How are districts/schools recruiting, supporting, and retaining students who are underrepresented in STEM classes and does this make a difference in terms of career choices? How does the school leadership view PLTW and what are their perspectives on this program as an opportunity for their school, staff, community, and most importantly, their students who fit the above criteria to assist with narrowing the achievement gap and enter a STEM career field? Lastly, what is the student perspective of the effectiveness of their recruitment, on-going support, and factors which resulted in their persistence and retention in STEM while comparing their STEM involvement and metrics to the school's general population for common themes or discrepancies?

Perspectives on STEM

A brief review of the literature, such as GPA, SAT math scores, and a student's perception of academic abilities, provides a framework for understanding student success in STEM and related career fields. By understanding the challenges and opportunities that affect both access and inclusion of students, especially underrepresented students, we can influence public policy and programming in order to provide gateways to successful STEM careers and the opportunity to contribute to meaningful STEM innovations.

"The United States is losing its competitive edge because of insufficient investments being made in education and research and because only a small number of American citizens are entering STEM fields" (Ehrenberg, 2010, p. 887), which the "National Science Foundation defines as computer science, mathematics, life sciences, physical sci-

ences, behavioral and social sciences, and health-related fields" (Malcom, 2010, p. 31). Without replenishing this workforce, "the U.S. will face a major talent deficit in fields typically associated with experimentation and technological advancement" (Schneider, Judy, & Mazuca, 2012, p. 62), especially when considering the vast number of current STEM workers that will leave the workforce for retirement over the next thirty years. Therefore, "Policymakers, industry leaders, and educators must improve the quality of mathematics, science, and technology education at K-12 levels and increase the number of students who are interested in STEM fields" (Greene, Destefano, Burgon, & Hall, 2006, p. 53).

The new STEM workforce must be diverse as "Many inventions, breakthroughs, and significant leaps in science-related understanding and applications are less likely to happen under conditions of homogeneity of thought and perspective" (Greene et al., 2006, p. 53). White and Asian males have and continue to dominate the STEM professions leading to the underrepresentation of women and ethnic minorities in STEM (Schneider, Judy, & Mazuca, 2012). This homogenization has contributed to a lack of diverse role models and "diversity in science classrooms and laboratories [which] is not only socially unjust but also compromises the vitality and creativity of STEM endeavors" (Greene et al., 2006, p. 430). In fact, "all racial and ethnic minorities combined receive only 28%, 24%, and 21% of the total number of bachelor's, master's, and doctoral STEM degrees, respectively, awarded in the United States (...); [and] although women occupy almost half the jobs in the U.S. economy, they hold less than 25% of STEM jobs" (Dailey & Eugene, 2013, p. 683).

Increasing access and inclusion to these diverse populations potentiates a solution to the STEM crisis both quantitatively and for the purpose of innovation. "Racial and ethnic minorities were responsible for 91.7% of the U.S. population growth between 2000 and 2010[...]and 50.4% of the children born in 2011 were part of a racial or ethnic minority" (Dailey & Eugene, 2013, p. 683). This, coupled with estimates by the US Census Bureau, which projects that by 2023 more than half of all children in the United States will be children of color" (Linley & George-Jackson, 2013, p. 97), is a strong indicator that attracting, recruiting and retaining these individuals in STEM fields will both replenish and diversify the STEM workforce needed for a healthy U.S. economy.

Recruitment and programming efforts must be deliberate if they are to attract, recruit and then support and retain underrepresented students in STEM. This means that the exposure to STEM-issues and to diverse STEM role models must begin early in K-12 education as "children as young as ages six to eight years begin to eliminate career choices because they are the wrong gender, [and] by early adolescence, students already have strongly defined gender-role expectations about work [that is] influenced by parental socioeconomic status, parents' occupations and education levels, and parental expectations" (Tolgia, 2013, p. 15). Summer programming has been shown to be effective in exposing children and adolescents to the sciences as well as in providing mentorship by STEM professionals. This is extremely important for underrepresented students who may not have been afforded the exposure to diverse career options and role models as their more represented peers; "Seeing and interacting with successful figures enables adolescents to envision themselves in similar roles, thereby strengthening their identities" (Syed, Goza, Chemers, & Zurbriggen, 2012, p. 906) as science students. High-schools can serve as beacons for attracting and recruiting students to the STEM fields. Providing pathways to STEM through course counseling and advising, college campus visits to help students envision life after high school, and financial aid guidance are extremely important for individuals from lower socioeconomic backgrounds and those who have a lack of insight regarding navigation through college systems (Schneider et al., 2012).

Academically, to be successful in STEM students must be afforded "the exposure to coursework in middle and high school that would prepare one for advanced-level math and science" (Abdul-Alim, 2010, p. 10). However, underrepresented racial minorities may have "limited exposure to rigorous math and science courses in high school, lack of nurtured interest in STEM, and poor performance on college entrance and placement exams" (Strayhorn, 2010, p. 1). These issues of access are extremely important as "high school experiences determine students' academic preparation, educational expectations, and career knowledge; all of which are critical for postsecondary success" (Schneider et al., 2012, p. 62). For example, "high school AP classes and higher SAT scores were found to enhance persistence to graduation in STEM field majors" (Erhenberg, 2010, p. 890). To promote access, it is imperative that

underrepresented minority students receive academic supports such as faculty mentoring and tutoring that will increase their efficacy and persistence in STEM courses.

Students choosing one of the pathways of STEM must be supported for their retention and success in the program. "The transfer function of community colleges is paramount to increasing the representation of women and underrepresented racial minorities baccalaureate degrees in STEM fields" (Jackson, Starobin, & Laan, 2013, p. 70), as "about 50% of college students started their postsecondary education at two-year public institutions" (Jackson, Starobin et al., 2013, p. 69). In addition to access, inclusion is extremely important for underrepresented minority students as they experience unique challenges related to familial and cultural responsibilities and expectations and often generational differences which challenge their success while pursuing a college degree, in comparison to their peers (Reyes, 2011). This means there must be a "mutual sense of responsibility and commitment by community colleges and universities for ensuring the transition and success of women and ethnic/racial minorities in STEM disciplines" (Jackson et al., 2013, p. 74), as many of these students experience transfer shock their first year at four-year institutions. Transfer shock is the phenomenon in which underrepresented minorities thrive in community college, but experience a drop in academic performance in the university environment (Reyes, 2011). Reasons for this include feelings of "isolation, invisibility, and the sense of not belonging, along with the academic pressures of bigger classes, rigorous requirements, and insufficient attention to individual students [and] often lead women and underrepresented minorities to switch out of STEM majors or to switch within STEM" (Jackson et al., 2013, p. 71). Therefore, it is critical that both social and academic supports be made available during and following the transfer from the community college to the university (Hurtado, Newman, Tran, & Chang, 2010).

"Persistence in STEM education not only requires mastering the technical skills needed to be a scientist, but also entails a social psychological process by which students begin to see science as a salient part of their identities" (Merolla & Serpe, 2013, p. 580). "Having a strong sense of identity as a science student may be particularly important for underrepresented minority students given the immense barriers they experience pursuing careers in STEM" (Syed et al., 2012, p. 906). Enrichment research

programs (Merolla & Serpe, 2013) and "structured undergraduate science research opportunities have shown to positively impact persistence and identity development as a scientific researcher" (Hurtado et al., 2010, p. 12) as they allow students to work on STEM-related issues and with STEM peers and faculty. This is important because "when students are able to view themselves as a member of the STEM enterprise, they are able to commit to the challenges and obstacles that are presented as a result of their identification within the field" (Jackson et al., 2013, p. 74). Moreover, research indicates that "a student who participated in research during half of his or her undergraduate career is about 171% more likely to attend graduate school compared to a student that never participated" (Merolla & Serpe, 2013, p. 589). For underrepresented minority students, STEM faculty members were found to have significantly influenced their persistence in STEM and higher education. By "serving as teachers, facilitators, coaches, confidants, and mentors who developed a vested interest in [their] success, cared about his/her development as a young, emerging professional, and with whom [they] had developed trust" (Strayhorn, 2010, p. 5), they were able to develop both the knowledge and an identity integral to succeeding in STEM.

Meeting the academic and social needs of underrepresented students is crucial if access and inclusion, and their ultimate success in STEM fields, are to become actualized. "At both precollege and postsecondary levels, much effort is needed to create and implement powerful STEM curricula, prepare and support highly qualified teachers, deliver effective instruction, and give diverse groups of students rigorous and engaging STEM educational experiences throughout their school years" (Greene et al., 2006, p. 54). This however necessitates the need for the professional development of STEM faculty to ensure that STEM students receive equitable and diversity sensitive instruction and support. "No assumptions about the multicultural competency of faculty should be made. All faculty need to be provided with resources and support on issues of diversity and difference" (Linley & George-Jackson, 2013, p. 101) in order to better support all STEM students, but especially those traditionally underrepresented. This is vitally important as "teacher behavior and attitudes can provide the greatest influence on their student's success in achieving equity in the educational and occupational spheres" (Tolgia, 2013, p. 17) of STEM.

Table 1
Informal Interview Responses for STEM

Categories	Find	Choose	Recruiting	Retain
Teacher	12	2	7	3
Friend	1	3	3	1
Parent	5	2	5	6
Counselor	0	0	0	0
Other	2	Building/robotics/enjoy it/family are engineers 13	4	Career and interest 12

Note. The table data summarizes finding out about STEM and subsequent choosing, recruiting, and retention.

Scope of the Study and Approach

This study focused on two high schools in two Northern California cities. As such, this was a comparative study to ascertain how two distinct schools promote inclusion and success for underrepresented students in STEM. Specifically, the focus will be on understanding leadership perspectives, perceptions, recruitment practices, support, and retention of underrepresented students in their STEM programs. For the purposes of this paper, the first school will be referred to as Access High School and the second school will be Central High. Although Access and Central High are located in Northern California, they are actually located in two separate geographical regions. Access High is in its second year of implementation and can be considered a start up program and uses a STEM curriculum developed by a mechanical engineer for his students. In turn, Central High uses a Project Lead The Way (PLTW) curriculum. This allows for an interesting comparison as it juxtaposes curricular differences on the implementation of STEM. "PLTW is the nation's leading provider of rigorous STEM education programs. The nonprofit organization partners with middle schools and high schools to prepare students to become the most innovative and productive in the world (Planting the Seeds for a Diverse US STEM Pipeline, 2010, p. 64). "PLTW is a rigorous four-year program of honors-level math and science, plus engineering, culminating in at least pre-calculus and advanced science classes, along with an intensive, hands-on collaborative engineering project" (Cech, 2008, p. 39). The hands-on,

project-based program engages students by showing them how what they are learning in mathematics and science applies to the real world" (Planting the Seeds for a Diverse US STEM Pipeline, 2010, p. 64). Students in PLTW programs outperform non-PLTW students and are effectively closing the achievement gap, thereby making high school graduates college and career ready (PLTW Fact Sheet, 2010). Both the Mechanical Engineering and PLTW teachers play a significant role in student success by working closely with students to provide academic support and exceptional mentoring (Planting the Seeds for a Diverse U.S. STEM Pipeline, 2010, p. 64).

The research strategy for this analysis is both exploratory and explanatory using a qualitative method approach. This strategy investigates the structure and essence of experiences of PLTW school leaders and teachers, and the experiences of underrepresented students while in the STEM, PLTW curriculum. The value of this qualitative approach will be enhanced by persistent observation spread over two schools and triangulated with the common themes emerging from the data. To increase validity and reliability parameters, quantitative measures in a broad sense will be used. Three sources of qualitative data will be used. A standardized, open-ended interview technique will be used to reduce researcher bias and increase reliability. The second qualitative source of data will be a student questionnaire. This questionnaire will ask STEM related questions regarding their recruitment, support, and retention in their STEM/PLTW curriculum. The third

Table 2
Student Indicators of English, Writing and Math Support for STEM Classes

Status	English Spt		Writing Spt		Math Spt		Gender: Math Support			
	Freq	%	Freq	%	Freq	%	Female Freq.	%	Male Freq	%
No	16	84.2	13	68.4	11	57.9	3	50	8	61.5
Yes	3	15.8	6	31.6	8	42.1	3	50	5	38.5

Note. Gender requests for math support are about the same percentages as math is seen as “gateway” into retaining students in STEM curriculum and future careers.

method will utilize participant observation by maintaining a journal to record reflections throughout the study. These field notes were both descriptive and interpretive.

Understanding the Data

The analysis of this data was conducted by triangulating between a series of interviews, a questionnaire and field observations at each of the two schools. First, data analysis was conducted by carefully evaluating all of the qualitative data collected from the three sources of data. A linear descriptive summary of the data will be provided followed by a synthesis that addresses how this research informs access to STEM for underrepresented minorities. The first phase of analysis consists of defining variables in the student data and will be analyzed using the Statistical Package for the Social Sciences, version 22 (IBM Corporation, 2013). It will generate frequency tables to assist in determining student perspectives regarding their recruitment, support, and retention in the STEM related programs. The nature of the analysis will be both descriptive and inductive.

The participants of this study attended one of two schools sites. Access High had 15 students participate while Central High had 4 participants. All together there were 13 male participants and 6 female participants in this study. A summary of the participants is provided in Table 1. This summary lists how students became aware of the program as well as their recruitment and retention into this curriculum. From the beginning of this project it was evident that the major factor affecting recruitment was teacher contact with individual students. Choosing to enter a STEM program seems to revolve around their

interests, wanting to build, enjoying the robotics aspect of the curriculum, and their wanting to become engineers in the future. Recruiting students into the STEM program is influenced by teachers and parents while retention in the program is a career or natural interest which parents play a significant role in as well.

Policy Recommendations that Promote Access to STEM

Policymakers, industry leaders, and educators should take notice of this study’s results.

The significance of the findings can assist in advocating for equity and inclusion of all STEM students, but especially for the underrepresented. Society and its future economic base and stability depend on replenishing and diversifying a strong STEM workforce. Future jobs and becoming economically viable while in a global market can provide opportunities for underrepresented groups to excel and thrive here and abroad, thereby redressing disparities and social injustice. Therefore, the commitment by key stakeholders to both providing access and inclusion of these students will narrow the achievement gap and encourage others to do the same if it is presented as another viable opportunity available to all groups.

The potential to improve practice is also a key aspect of the study. As our graduation rate is 70% nationwide, it seems to reason we need to look at current practices of “teaching to the test”, lectures, and overall lack of building student engagement, and a student’s prior knowledge. This study’s findings could lead to some insight on how PLTW curriculum could assist all teachers with key strategies for increasing student achievement. As a result, con-

tinued replication and use of the new strategies could result in key policy changes that could further narrow the achievement gap of future generations. PLTW embraces the funds of knowledge students possess with family and life experiences, combined with past and current coursework, and provide the foundation for the opportunities to solve proposed coursework problems thereby increasing understanding and applicability of STEM issues. In addition, PLTW's distributed learning opportunities for both teacher and student provide exponential growth as students work as a team to solve complex problems while the teacher is a "guide by the side".

Teachers have a significant role in informing districts on the classes a school offers and is where school districts and schools need to direct their energies to begin marketing their programs. Students overwhelmingly choose to enter STEM curricula because they have the "need to build" or "Bob the Builder" mentality. They enjoy this aspect of STEM immensely. The robotics club or robotics embedded curriculum is the carrot to bring students in to further investigate the possibilities. As expected, teachers and parents play a critical role in recruiting students into STEM curricula for a possible STEM career in the future. They have the most direct influence over the student while at school or while at home. Lastly, students stay in the program because it is a future career choice and an interest they want to pursue. Parental influence is still a strong motivator in encouraging their student to stay in the program as well.

Recruitment efforts must be deliberate if they are to attract students and increase the number of STEM interested students. A somewhat surprising find was that friends and counselors have little to no influence on STEM recruitment, support, or retention. Peer pressure and program knowledge aside, this finding contradicts what one would expect in friends and signifies that the counselor's knowledge of programs are not being sought out or are ignored. Friends do play a small role however, and the researcher suspects with more subjects and the completion of the student questionnaire results, there might be some hope yet for these two viable options in the future to increase our underrepresented student populations into a future STEM career. The more visible the STEM programs are, the more attractive and popular as a career they will become. Consequently, schools need to advertise or market them more to get the word out about the innovations,

career options and pathways to STEM. Opportunities for educating students and parents and creating excitement about the STEM fields include open houses, back to school events, and robotic events and competitions. There is nothing like being able to advertise and market your own program by observing the students involvement within the program and the activities they do.

Academic supports are integral to student's success in STEM. Writing and math were subjects that the participants responded they sought extra assistance with. Conversely, there were no requests for reading or science support as indicated on a survey. The sample size ($n = 19$) was small, but it seems a reasonable response overall. In order to enter and perform in a STEM program, one needs to have the ability to read and have science analysis skills to maintain their ability to work within cooperative groups and perform tasks asked of them. This will be especially true as California transitions into the Common Core State Standards (CCSS). The integrative testing module using the Smarter Balanced question database will require solving problems asked using the assimilation of all core subjects and prior knowledge attained in and out of school. This will be a transition from the state standardized multiple choice exams measuring test taking strategies to using actual core subjects for solving real world problems with a project based mentality.

This project-based approach was observed in the field notes during two observations at each school. During each visit the class was provided instructions on what was to be done and within their assigned groups were asked to work on the assignment at their pace with a due date set ahead of time. All students were participating at different levels and within their assignments. They needed to know key mathematical equations and scientific theories and perform calculations in order for their project to be operational. In addition, the ability for students to communicate orally and in written format was a definite advantage. This will also be helpful to them in the future as 21st century employers prefer team collaboration, communication skills, critical thinking, and a can-do attitude.

Conclusion

The policy implications from this study are central to promoting access and inclusion in STEM education and future career pathways. Schools need to market and advertise their STEM programs and begin recruiting within

their school, particularly at the middle school level. It was clear from this research to the initial “curiosity” that is promoted by the STEM curriculum needs to be fostered so that students continue to be interested in STEM once they get to high school. Recruitment efforts must ensure that STEM programs are made visible to all students. Outreach opportunities can and should be encouraged with newsletters, back to school nights, open houses, parent teacher associations, school web sites, schools’ Facebook pages and any other avenue. It is important to continue encouraging teachers, parents, and students to ask questions and provide them with information on the STEM curriculum offered at school. This also needs to be done more effectively on the part of high school counselors. They need to be knowledgeable about both STEM curriculum and know their students well to determine if STEM is a good fit for the student.

Academic programming must be made available to support STEM students. Tutoring support in the areas of math, writing, and English, are extremely important if underrepresented students’ retention and success in STEM classes is to occur. Lastly, schools need to recruit underrepresented minority students and provide incentives to explore the pathways to STEM in their program offerings. These actions have the potential of influencing a student’s future career pathways in STEM and for resolving the disparity related to the STEM fields critical for US competitiveness in our new global economy. As seen in the literature review, there is no definitive research in a leadership defined role in the recruitment, support, or retention of underrepresented students in STEM coursework or career fields in their own perspective and school practices. This study identified some practices and policy changes needed to increase underrepresented minorities in STEM. Promoting inclusion for those underrepresented is an issue of equity and social justice that schooling and programming must address along the K-16 continuum.

About the Authors

RANDY A. KILMARTIN serves as a high school counselor for the Fairfield-Suisun Unified School District. His research focuses on the connection between counseling and access to STEM.

Email: randykilmartin@csus.edu

KATRINA K. PIMENTEL specializes in gerontology and care for the elderly. She currently serves as an editorial research assistant for JTLPS.

Email: katrinakpimentel@aol.com

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