Pedagogical Implementation of 21st Century Skills

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Abstract

This paper examines students’ perceptions of how intentionally taught 21st century skills have transformed their lives. Personal development education (PDE) encompasses interpersonal and interaction skills that are required for students to function and succeed in global-oriented 21st century colleges and careers. The Common Core State Standards (CCSS) is a reform movement bringing 21st century skills into the mainstream. Embedding 21st century skills such as communication and collaboration is necessary and timely, meeting the requirements of the CCSS English-language art’s listening and speaking standards. This paper explores students’ perceptions of how PDE influenced their ability to communicate more effectively and work collaboratively with a range of peers and others. Therefore, as the value of this education is recognized, this paper also offers practical implementation and application strategies for core curriculum.

Keywords: Personal development education, soft skills, 21st century skills, common core standards, pedagogic implementation

Inequitable student outcomes and a growing population of under- or mis-educated adults are predictable as long as our kindergarten through grade-12 (K-12) education retains its current structure (Rumberger & Lim 2008: Career & Technical State Report, 2008). One way to mitigate patterns of mis-education is through personal development education (PDE), an essential dimension of 21st century education designed to prepare lower-income and immigrant students to succeed in college and careers (California Department of Education CDE, 2006). This paper is the result of a research study that examined the effects of PDE on students’ perceptions of growth, with particular
focus on and attention to potential benefits for socioeconomically disadvantaged (SED) subgroups. The paper offers a pragmatic approach to teaching and learning framework that embeds career education in the school system, and it identifies factors that strengthen student career development (California Department of Education [CDE], 2006). This study sought to document the role of PDE through students’ perceptions of 21st century behavioral skill development, and to report on whether such an education gives students multidirectional skills to navigate appropriately and successfully both in school and in their careers. The context of this study is a career and technical education (CTE) program that specifically includes PDE as a framework within which educational transformation for first-generation college attending students can take place.

Providing PDE to students in SED subgroups is a critical dimension of equitable education. According to Johnson (2008), “those born into economically advantaged families receive through rearing the instruments needed to appropriate the knowledge transmitted in schools and those lacking capital and the cultivation of the requisite cultural tools unfortunately depend on schools to cultivate these dispositions” (p. 231). “Proponents of neoclassical human capital perspectives hold that individuals who possess a higher level of achieved status receive better paying jobs because their achievements—signal—to employers that they are more able and therefore potentially more productive” (Sakura-Lemessy, Carter-Tellison, & Sakura-Lemessy, 2009, p. 408).

Twenty-first century skills can easily be taught and embedded into core curriculum. The author has taught these skills consistently in her courses for more than 20 years. She has created and conducted PDE workshops on embedding these skills into their individual pedagogical practice. Therefore, this paper discusses the value of teaching PDE, specifically 21st century skills of communication and collaboration. The methodology used to conduct this study and the resulting findings are discussed, followed by a discussion stemming from empirical knowledge of teaching the skills to students as well as a description of a Professional Development Workshop for teachers that embeds 21st century skills curriculum in core academic courses.
The Value of 21st Century Skills

This study focused on the role of PDE for disenfranchised students’ success in both college and careers. Workforce development literature shows that they are necessary for students’ success, both in college and careers, in a globalized, high-tech, knowledge-based world (Friedman, 2005; Schuman, Besterfield-Sacre, & McGourty, 2005; Trilling 2009). The literature supports the case for PDE, yet mainstream schooling has historically ignored these recommendations. Additionally, the newly adopted Common Core State Standards (CCSS) address PDE by adding six speaking and listening criteria to their literacy standards, making this study timely.

Within CTE, this research study focused on 21st century skills for achieving success both in school and career. PDE is very broad, and the skills that fall into this education vary. The phrase soft skills mean those skills that do not fall into the technical domain. They are called “SCAN skills” by the U.S. Department of Labor (so named from the late 20th century Secretary’s Commission on Achieving Necessary Skills ([SCANS], 1991 p. 5); “professional skills” by the American Board of Engineering and Technology ([ABET] Schuman et al., 2005); “Equipped for the Future—EFF Skills,” (Equipped for the Future, 2009, p. 3); and “21st century skills” by the organization called Partnership for 21st Century Learning (2003, overview page).

Soft skills can be defined as a cluster of personality traits; social graces; and facility with language, friendliness, and optimism (Bancino & Zevalkink, 2007). According to Partnership for 21st Century Learning (2003), these soft skills are defined as critical thinking, communication, collaboration, and creativity. Other definitions include communication skills, people skills, teamwork skills, demeanor, motivation, flexibility, initiative, work attitudes, and effort (Moss & Tilly, 1995). However these interpersonal skills are defined or named, the current workforce development literature states they are now recognized as necessary because of increasing demand for a broader skills set—especially among technical professionals—due to increasing global competition, and the search for new ways to increase productivity and profit (Bancino & Zevalkink, 2007). Research shows that when employees have had PDE, companies gain a marketable edge in competition (Trilling 2009). Given that researchers have identified the critical role of PDE, educators must
explicitly teach these skills and evaluate whether and to what degree students have attained them.

According to Thomas Friedman (2005), we are currently in an era called “Globalization 3.0.” (p. 10). Due to rapid advances in technology, this era is unique because of the newfound power of individuals to collaborate and compete globally. Friedman has claimed that the power of the individual to work and survive by competing globally is enormous, and now the individual is required to work both alone and on a team performing complex tasks as knowledge workers. Americans will do well if they produce knowledge workers who create idea-based goods and can connect “knowledge pools” (p.10) all around the world. This work, then, demands high-tech skills (hard skills) as well as teaming, collaboration, and communication (soft) skills.

A team of researchers examining engineering education suggested that globalization has been driving changes in our economy, and therefore our educational practices (Schuman et al., 2005, p. 43). They identified four reasons for these changes: fast-paced information technology changes, corporate downsizing, outsourcing, and the new global work environment. Because of the new world economy and a growing group of overseas trained professionals willing to work for much less monetary compensation than the American workforce, the American educational system must not only provide hard skills but also value-added 21st century skills to justify a higher wage. To stay globally competitive, the U.S. workforce must be excellent in both.

Empowering students with a new language and fluency in appropriate behavior for their own personal success and achievement is timely due to all the global changes and forces at work. Twenty-first century skills education is relevant for all students to succeed, both in a college setting and in the workplace and according to Mitchell, Skinner, and White (2010), “employers rate soft skills highest in importance for entry-level success in the workplace” (p. 44).

The Research Study

This qualitative inquiry pursued understanding intentionally taught communication and collaboration skills and how this education
modified any and all aspects of the students’ lives. In PDE literature, the students’ voices and perspectives were missing, and therefore, the hope of this paper was to shed light on the significance of PDE as a relevant educational reform.

The context for the study was a program called Business United in Investing, Lending, and Developing, or BUILD, that was designed to provide both academic and personal skills for a specific population. This intervention program targets SED subgroups, beginning in the 9th grade teaching entrepreneurialism. In grades 10th through 12th, it becomes an afterschool program teaching entrepreneurial and 21st century skills as well as academic tutorial instruction with a strong college focus.

The researcher was granted an opportunity to observe this PDE program, gather students’ voices and perceptions about PDE, and analyze the findings. The participants shared their stories of personal transformation through 24 informal interviews and four focus groups, which resulted in new knowledge. These new findings add to the existing knowledge surrounding 21st century skills. The inquiry revolved around the students’ perspectives of their own learning, what it means to them, and the impact of this new learning on their lives. The data revealed innovative thinking regarding the value, effect, outcomes, and issues surrounding PDE.

The Research Questions

1. What changes have students experienced with 21st century competencies, namely communication, collaboration, critical thinking, or creativity? How have these changes influenced the students’ personal, family, school, and/or community life?
2. How have the students comprehended, used realistically, and incorporated these skills into actual work habits?

Data Collection Tools

The type of data needed for the paper included the following:

- Student interviews from three grade levels—sophomore, junior, senior
- Student data demographics
• Student observations
• Student written response journals

Findings: Communication, Collaboration, and Credibility

This study focused on the role of communication and collaboration in self-empowerment and students’ sense of their own credibility. Before this study, the researcher had a general idea that PDE was a way to empower youth, particularly SED populations. The researcher originally thought 21st century skills empowered students for their future career success. But the students’ portrayal of their experiences illuminated the contribution of 21st century skills to increasing confidence, self-efficacy, and credibility.

The overarching theme that permeates the findings from this paper is self-empowerment through PDE, specifically through learning communication and collaboration skills. While the literature recommending 21st century skills development was consistent in education, (Trilling 2009) the researcher had not anticipated the depth and breadth of the personal transformations the participants shared. The emergent findings are that (a) communication and collaboration are the gateway skills to the rest of the 21st century skills, and participants perceive code-switching as an added-value skill for effective communication; (b) participants appreciate the art of collaboration, recognizing the challenges and successes inherent in people management and interpersonal relationships; and (c) participants believe their credibility is increased as an outcome of learning effective communication techniques.

Communication

One key finding was that communication is a gateway skill to other 21st century skills. Communication skills lead into the more sophisticated, complicated soft skills of critical thinking, problem solving, stress management, and risk taking. Communication is powerful: language holds immense power in the development of successful human relations. In fact, effective communication’s real purpose is to relay information successfully from one person to another. Freire (1993) stated that the oppressed must fight for their own liberation; through effective communication, this liberation can
be a reality. According to Stewart (1990), “the quality of your life is directly linked to the quality of your communication” (p. 6). All 13 participants knew the value of effective communication and that language and communication are keys to their success in life. The participants recognized the value of effective communication by expressing their ability to discern the communication skill set needed for a given situation in a sophisticated way. Their awareness of the “other”—the audience—is essential to their ability to communicate. Likewise, participants voiced their concerns about wanting to hear and be heard, to know and be known, and to understand and be understood.

The way the participants are understood is through their ability to code-switch, which was defined by O’Neal and Ringler (2010) as “a strategy that helps us communicate in socially and culturally appropriate ways” (p. 50). Therefore, it is safe to say that code-switching is a skill with which one can change words and/or behaviors to effectively communicate and obtain a desired goal. They believe that without these skills, newly hired employees have only a small chance of success in their field of employment. The data showed a strong awareness of informal or formal language and the need to discern when to code-switch; most participants valued code-switching as part of their communication successes and demonstrated belief in their ability to use it appropriately.

Discerning what type of language to use in particular situations and when to use it is a sophisticated judgment skill expressed in participant responses. The participants realized the value of code-switching for effective communication, noting that personal communication is comfortable when one has built-in trust with the other. Formal communication is another mode of speaking or writing that relies on one’s ability to discern which language to use, and, as Sienna described, “Just [use] normal English.” The participants stated that formal language is limited and specific, whereas informal language has no boundaries. They also noted that sometimes the two forms overlap, forming a gray area. Sienna added, “It’s less formal, but in a way, it’s still formal.”

Simply stated, the execution of effective communication requires the sender to access formal communication skills so the receiver can fully comprehend the message. When the receiver fully
understands the message and believes it, the communication is deemed successful—which establishes the credibility of the sender.

The Art of Collaboration: The Need to Communicate in Order to Collaborate

A second finding relates to the art of collaboration. Some participants demonstrated strong views on the subject of collaboration. Collaboration is also a gateway skill because producing work with others is a highly challenging skill to acquire. If communication and collaboration skills can empower marginalized populations and strengthen their sense of self, these skills also can help people be open and therefore vulnerable, ultimately achieving successful human relations. Personal sacrifice was a strategy spoken of many times in the current study, in terms of a complex tension between what they individually sacrificed for the team and what they could hold on to.

Interestingly, the participants shared stories about experiences that were not successful, but that revealed keen insight about interpersonal conflicts. Some ignored other teammates, some set boundaries and held firm to them, while still others threatened their teammates. The participants concluded that sometimes people have sad lives, and their responses revealed a heightened sense of empathy, allowing them to give personal space and extra time for their teammates to accomplish the work.

Maria shared a personal, painful story of economic hard times as she almost became homeless. People called her terrible names like “toad.” She remained strong and said, “People don’t know when they judge, and they may hurt someone’s feelings.” They are learning to manage people by adapting to situations, events, as well as each other. Teamwork depends on team members’ cooperation. I believe they are not victims of their marginalized background but rather warriors in overcoming their hardships that can serve them well in life—both in school and in their careers.

Credibility

Credibility as an outcome of effective communication was the third finding. Communicating successfully results in credibility, which in turn empowers the individual (Freire 1993). For example, Bobby
showed the importance of credibility by saying, “I’ve been able to present my ideas in a way to make them easily understood and to get to my point faster.” Communicating clearly and concisely is key to building trust; sending a message needs to be done correctly to have the receiver believe the sender is credible. Participants described the value of credibility throughout our interviews; however, the literature reviewed did not directly address the importance of credibility as vital in building self-efficacy.

Twenty-first century skills of communication and collaboration lead to empowerment through the attainment of credibility. Freire (1993) taught that to liberate oppressed populations permanently, education must actively engage them in dialogue to create action to enable them to access their own power. Participants needed their ideas, thoughts, and opinions valued; therefore, they are valued. The participants want to feel worthy, not worthless. According to Freire, the term *marginalized* refers to lack of access to power. Therefore, effective communication is a tool to access power, and the participants valued this tool as they learned to use it. For example, Bobby spoke about his growth: he used to just say what he thought, hoping everybody else would agree, but he would not argue or defend his point if they did not. Since receiving this education, he has gained effective communication skills, so he can stand his ground, insisting on his argument or his idea.

The theme of credibility surfaced again with a wider scope of influence as Ronesha spoke of her community members as dispirited and not believing in themselves. This statement supports the value of credibility with the participants and how vitally important it is to be believed. When students learn to communicate effectively, they have a better chance of being believed, leading them to believe in themselves. As Ronesha said, “It’s just like they’re closed to different opportunities that they actually have.”

**Synthesis of Communication, Collaboration, and Credibility**

Twenty-first century skills build social intelligence (Goleman 2006), which is defined as intelligence with human relationships (Goleman, 2006). Freire (1993) explained that when people are oppressed or not given adequate education, they become stifled. These 21st century behavioral competencies are a key to unlocking the power all people
have; this is especially important in marginalized populations who have been oppressed and silenced. These skills can help all populations access their own power, in a dignified manner, and use it to their advantage.

As Maria pointed out, these are “survival” skills within a 21st century context. Ronesha spoke of the defeated spirit within her own community, believing that if they only knew these skills, people in her community could transform their thinking. Raj told us of the new reality of cyberspace, where people communicate and connect digitally, forming relationships and working together. Participants spoke of self-empowerment and how 21st century skills are a tool enabling them to access their own power. They described how they used these skills in all areas of their lives, including church, school, family, and friend relationships, as well as in navigating power relationships. They have a keen sense of using these skills to speak to power, so they too can access such power for their personal use.

After conducting this research, the researcher realized that PDE plays an essential role in students’ lives beyond employability skills. PDE contributes to human empowerment by teaching students how to access the power that lies within them. It is a higher-level, transformative education. Ronesha clearly articulated the immense need for this kind of education in lower socioeconomic neighborhoods where people have given in to the spirit of poverty: “Our town is low income and a lot of people don’t believe—a lot of people don’t have that motivation to succeed. . . . They don’t believe in themselves. . . . ‘School is whack; I’m just going go hang out with my homies.’” PDE can transform people—and through those people, transform their communities—by empowering them with their own creativity, critical thinking, and ability to achieve dignified interpersonal conflict resolutions. The reach of PDE is wider than thought.

**Implications for Educational Reform**

Providing PDE to students, particularly in SED subgroups, is a critical dimension of equitable education. The report *Pathways to Prosperity—Meeting the Challenges of Preparing Young Americans for the 21st Century* (Symonds, Schwartz, & Ferguson, 2011) specifically speaks to the necessity for soft-skills education:
Hard and soft skills are essential for success in this economy. These findings strongly suggest that a more holistic approach to education—one that aims to equip young adults with a broader range of skills—is more likely to produce youth who will succeed in the 21st century (p. 4).

California adopted CCSS for both English and math. CCSS are designed to prepare every student for success in college and the workforce. These standards are designed to ensure that students can compete globally in the new world order. The language standards include not only elements of reading and writing but also speaking and listening. This is a shift in thinking, bringing an increased awareness to the value of 21st century skills, which makes this study timely. Through California’s adoption of the CCSS, students learn to express ideas, work together, and listen carefully to integrate and evaluate information (California Department of Education, 2010).

Education needs to be separated into three equal domains. ConnectEd (2012), for example, built a conceptual framework identifying academic, career, and 21st century domains. Similarly, the researcher contends that education needs restructuring into three equal domains for educating the student as an individual and not as an object. This vision would include academic education, career and technical education and personal development education (PDE). Such a three-part structure would support greater educational equity, policy changes, and program development. The researcher envisions that these three domains of education be embedded into the existing kindergarten through grade-12 curriculum, rather than separating them into individual components. This integrated approach would be articulated as instructional modalities throughout the current academic system.

**Pedagogic Implementation**

Understanding the value and the need for PDE is just the beginning. As with any educational reform movement, the challenge is bringing it to the classroom. Implementation of 21st century skills can be exercised and executed as one would any academic curriculum. The curriculum project entitled “C+C=S: Why Is It so Hard to Communicate: A Student-Created Research Project” is an example. This section includes a summary of the curriculum and of a PDE workshop for teachers taught by the researcher.
The C+C=S Curriculum

The methods used to teach 21st century skills included direct instruction, interactive lecture, demonstration, modeling, discussion, simulation, journal writing, questioning, interviewing, project-based learning, cooperative learning, and reflection. Other methods included using objective quizzes and tests, reflective essay writing assignments, questionnaires, rubrics, and observations. This curriculum unit was taught in daily in seven 50-minute class periods. It was taught in a personal finance class, but could be taught in any academic class.

Students were first taught a working vocabulary of communication and collaboration terms, and their knowledge was assessed. Then, in teams, students conducted 2 days of field research, observing nonverbal communication and ineffective communication strategies. They made 20 observations in a public place, and recorded five different effective or ineffective communication scenarios. They then shared and synthesized their findings within their teams, identifying correct and incorrect way people communicate. The project culminated in the opportunity to practice formal oral presentation communication skills using PowerPoint to share findings with the class. A written reflective essay was also part of the end product.

Overall, this unit was successful, as evidenced by the students’ reflective essays, in which they commented on their individual learning experiences. Remarks included the following:

• “If people weren’t able to communicate with each other, then society would break down. One of the main problems with communication is that it’s not always received and understood.”

• “A big part of eye contact is building trust. A person with whom you’re talking will be more likely to trust and respect you because eye contact indicates openness in communication.”

• “Smart phones are the by far the largest and most tempting distraction that we have today. They are easily accessible and they are so tempting to pull out of our pockets and they eventually take us completely away from a conversation at hand.”
“Know that being a good listener is vital to your success in the future.”

In sum, this project was met with a high level of success. Ideally, this unit should be taught at the beginning of an academic year so the communication and collaboration vocabulary, skills and techniques can be reinforced throughout the course. PDE can be implemented in mainstream academic curriculum focusing on teaching 21st century skills, thereby changing students’ behaviors and ensuring success in their careers and their personal lives.

**Professional Development Workshop**

The workshop the researcher created and conducted was entitled Teaching Students the Communication and Collaboration Skills That Make Them Successful in the Classroom and Beyond. The researcher understood that the authority and ultimately the control of student-learning lie with teacher. Therefore, educating teachers on new strategies requires the facilitator to draw from the teachers’ professional expertise and input in order for effective curriculum design. Datnow (2005) suggested that most reforms are externally driven; therefore, leaders must be aware of the distinction between mandating change and supporting change. They must allow for decision-making time, increase information needed to enact the change, and bolster teacher involvement. If they really want to change classroom effectiveness, astute educational leaders must acknowledge that teachers hold the majority of the power to enact the reform. A change-agent school leader recognizes that power lies within the teacher and that empowering the constituents will ensure sustainable reforms system wide, such as teaching students new curriculum. Embedding 21st century skills into a teacher’s curriculum is based on concrete strategies such as vocabulary terms, readings, and quizzes, as well as acknowledging the individual teacher’s pedagogical style and specific content.

This 90-minute workshop was offered to various subject-area high school teachers. It was structured in three parts. The first segment taught the definition and value of PDE, specifically the 21st century skills of communication and collaboration. Secondly, the teachers were taught concrete communication skills for the classroom. A communication process was taught that broke down each step of
communication into small pieces so learners could understand the complexity and have a concrete, specific, new way of teaching effective communication. Stewart (1973) stated, “It is more accurate to view communication as an interaction, as a process of reciprocal influence” (p. 20). Lastly, the workshop dealt with collaboration skills. New vocabulary concepts and terms were introduced demystifying the notion that these concepts are difficult to teach.

Most of the teachers stated they would begin their fall semester with this type of instruction to ensure students’ success with communication and collaboration skills and strategies throughout the school year. One teacher planned to incorporate the following: “communication, collaboration, and creating synergy with students and between students; how to listen and offer feedback more effectively, solidifying understanding of basic, essential terms, such as decoding, interference, context, and proxemics.”

**Recommendations**

Recognition of the value of PDE is just beginning to take hold in the United States, along with placing a higher value on holistic education for youth. The current study highlights the role of PDE in bringing this authentic reform to education. The following are my recommendations.

**Strengthen teacher training programs.** A course called 21st Century Behavior Studies for the Classroom is recommended for new teachers. New teachers would be instructed in practical implementation of behavioral 21st century competencies in their classroom. Or PDE could be embedded into teacher training curriculum. Not only would this help new teachers with classroom management, but it would prepare students for achievement in all areas of their life, including college and career.

**Provide PDE workshops for teachers.** The author created and conducted 21st century skills workshops for teachers. This could be an ongoing series managed through school districts or county offices of education. The vision is to conduct an ongoing series of workshops, teaching practical instructional strategies, starting with communication and collaboration skills. A survey of teachers and administrators could identify specific skills needed for local educational needs.
Final Thoughts

This work is about power—who has it, who does not, who wants it, and how to access it. PDE is sophisticated education centering on human empowerment that teaches students how to access the power that lies within them. While this paper is about power, it is also about basic human dignity. Dignity is the quality or state of deserving respect. All people deserve dignity, but without effective communication skills—and without having a voice or being heard or understood—dignified treatment rarely occur. Simply stated, teaching effective communication and collaboration skills leads to student self-empowerment, which produces an expectation of dignified treatment. Self-empowered people expect to be treated with dignity; they demand it. Therefore, it is in their expectation that they receive it. Conversely, when people are oppressed or disempowered, they do not expect to be treated with dignity and thereby do not receive it.

Empowering SED populations to unlock their own potential for greatness was one motivation for this project. The participants eagerly shared their stories of growth, challenges, and changes while experiencing PDE. The education system can further empower SED students by embedding the core curriculum of K-12 institutions with three types of education: academic, career and technical and personal development. Embedding 21st century skills into the curriculum is easily adaptable to any subject or teachers’ style. The key strategies include:

1. Design curriculum based on concrete strategies (e.g., vocabulary terms, quizzes, and reflective writing)
2. Acknowledge and respect teachers’ individual pedagogical practices. They know their student population, specific content and own teaching style. Therefore, flexibility and adaptability are paramount in teaching educators new curriculum design.
3. Ensure educators receive knowledgeable training by supporting ongoing PDE. For effective curriculum design, workshops can be offered teaching 21st century skills. PDE teaches students how to access their own power and experience human dignity.

Students learn to speak with confidence and credibility. In turn, they can influence their families, friends, and communities, thereby working to create a more inclusive, diverse middle class in
the 21st century. The links between education, individual students, and their communities are evident in the voice of Ronesha, as she speaks her truth: “For me, it’s necessary to be teaching [21st century skills] in school because where I come from, it’s, like, it’s different because—well, not different—but most people aren’t exposed to these types of good skills that they should be having.”
References


