5 Becoming through Being: Dewey's Relevance to Educating for the Future of Work

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Abstract

The nature of work is fundamentally shifting due to advances in artificial intelligence. Economists suggest that society is entering a Fourth Industrial Revolution in which intelligent machines will be performing many intellectual tasks that are performed by humans today. This projected shift raises important questions about what work is uniquely human and what can be automated. Futurists are predicting that a significant portion of the skills in today's K-12 academic standards are the skills that will be automated. At a practical level, the current approach to education focused on preparation for future work may fundamentally fail today's students. At a philosophical level, John Dewey would argue that preparation for future work has already been failing students. This chapter uses the lens of Dewey's philosophy to critique the standards-based movement and provide an alternative vision for education that focuses on aligning students' everyday aims to important societal aims, which leads to the development of important knowledge and skills. The process of *becoming* productive adult members of society comes from supporting students in *being* fully present to shared societal aims.

Introduction

Many economists argue that we are entering a Fourth Industrial Revolution (World Economic Forum [WEF], 2019). The First Industrial Revolution in the late 18th century brought about mechanization through steam. In the Second Industrial Revolution in the late 19th century, electricity enabled mass production. The Third Industrial Revolution in the late 20th century generated physical automation through electronics and information technology. Artificial intelligence is driving the current Fourth Industrial Revolution. Across the revolutionary eras, the nature of work shifted from physical labor to knowledge production. Economists are projecting another significant shift in the nature of work as knowledge production becomes automated (Manyika et al., 2017). This projected shift raises important questions about what work is uniquely human and what can be automated.

While Dewey's career was concerned with the development of an education system to support the societal shifts that were a consequence of the Second Industrial Revolution, his philosophy is still relevant at the dawn of the Fourth Industrial Revolution. As was the case in Dewey's time, today's policymakers often define the aims of education in terms of preparation for future work.

> [T]he principle of preparation makes necessary recourse on a large scale to the use of adventitious motives of pleasure and pain. The future having no stimulating and directing power when severed from the possibilities of the present, something must be hitched on to it to make it work.
>
> (Dewey, 1916, p. 55)

This prophecy is borne out in the system of rewards and punishments built into the assessment regime that underlies the modern standards-based movement.

For Dewey, aims are the lens by which teachers view the current activity of the students. Making explicit the connection between the aims of adult society and the students' current aims helps students develop an emotional attachment to society's aims and gives reason for students to develop the adult knowledge and skills to accomplish their present goals. A second role of aims is to broaden the perspective of the student. The modern standards mostly focus on the technical domains. Dewey argues for the importance of also fostering morality through the study of history and geography, and aesthetic appreciation through the study of the arts. A benefit of the Fourth Industrial Revolution is the opportunity to rethink society's educational aims.

Workforce Preparation and College Readiness

For almost four decades, the United States has remained focused on the idea of organizing the education system around the technical content of the disciplines. Starting with the *A Nation at*

Risk report in 1983, policymakers at the state and federal levels have been defining the aims of education through sets of standards, particularly in math, English language arts, and science. The Common Core mathematics, Common Core English language arts, and the Next Generation Science Standards are the most recent iteration at the national level. At the heart of these standards is an articulation of the knowledge and practices that the standards developers believe are prerequisite for success in college and in the workforce.

In conjunction with the development of these standards has been the development of standardized assessments to track student progress in mastering the standards. It is through these assessments that policymakers are rewarding and punishing as Dewey had predicted. At the federal level, the U.S. Department of Education's Race to the Top initiative required state awardees to incorporate student test scores into their state teacher evaluation system as a condition of funding (Au, 2009). At the local level, districts are shutting down schools with chronically low test scores on state exams or reconstituting them as turnaround schools (Peck & Reitzug, 2014). Districts are also exploring different approaches to rewarding principals and teachers when their students achieve high test scores on state exams, and firing them if their students achieve low test scores on state exams (Goodman & Turner, 2013). Federal, state, and local policymakers from both political parties are holding schools, principals, and teachers responsible for the performance of their students on state exams (Au, 2009).

Researchers are accumulating evidence that policymakers' emphasis on high-stakes assessment has indeed changed the focus of instruction. A significant milestone in the timeline of high-stakes testing is the No Child Left Behind Act (NCLB). This reauthorization of the Elementary and Secondary Education Act elevated high-stakes testing from the purview of the state to a national mandate. Every state was required to assess students in reading and math from 3rd through 8th grades, and once in high school. For science, NCLB required states to assess once in primary grades, once in middle school, and once in high school. Schools were being judged on the percentage of students meeting the standards on each of these assessments. As a result, the vast majority of school districts increased the amount of time elementary students spend on reading and math and decreased the amount of time they spend on science and social studies (Kolbe et al., 2011). In less than a decade after NCLB, students were spending an average of 75 minutes/week less on science than they did prior to NCLB, which adds up to three fewer elementary school years of science instruction.

In addition to shifting the amount of time students spend on more frequently tested subjects, the nature of high-stakes assessments also influences the nature of the content that is taught. High-stakes assessments tend to only indirectly measure important complex, cognitive outcomes using questions that focus on observable basic knowledge and skills. The underlying assumption is that these observable basic knowledge and skills are correlated with the important complex, cognitive outcomes. Therefore, basic knowledge and skills can serve as a proxy for complex outcomes (Frederiksen & Collins, 1989). However, Frederiksen and Collins prophesied that attempts to increase test scores would focus on the indirect, basic knowledge and skills on the assessments rather than the important complex, cognitive outcomes for which these assessments serve as proxies.

Almost 20 years later, Au (2007) found strong evidence to support the Frederiksen and Collins (1989) prophesy. In a metasynthesis of 49 qualitative studies, Au (2007) examined three ways in which high-stakes testing impacts school curricula: (1) subject matter content knowledge, (2) structure or form of curricular knowledge, and (3) pedagogy. He found that it was rare for teachers to be able to focus on high-quality instruction in the face of accountability pressures. In those rare instances, students were already meeting the standards (Rex & Nelson, 2004), or the assessment directly assessed important complex, cognitive outcomes (Yeh, 2005). There were also rare examples of stalwart teachers who developed techniques for subordinating test preparation as one piece of their overall instruction (Wollman-Bonilla, 2004). However, for the majority of studies he reviewed, high-stakes testing led to a narrowing of content to the subjects that were tested, fragmentation of knowledge to test-sized pieces, and increases in teacher-centered instruction (Au, 2007).

These fragmented bits of knowledge are severed from the present life of the student. Since that knowledge is only important as preparation for college and then career, grading is used as reward and punishment to maintain motivation. The students are simply trained to respond to the stimuli presented to them in school:

> Now in many cases—too many cases—the activity of the immature human being is simply played upon to secure habits which are useful. He is trained like an animal rather than educated like a human being. His instincts remain attached to their original objects of pain and pleasure. But to get happiness or to avoid the pain of failure he has to act in a way agreeable to others.
>
> (Dewey, 1916, p. 13)

Although the standards are set up to prepare students for future life, the students themselves do not see a connection. Even though a majority of students have high aspirations for professional careers, regardless of gender, race, ethnicity, or socioeconomic status, most high school students view their courses as boring and disconnected from their lives (Csikszentmihalyi & Schneider, 2000). Many unfortunate students have high career aspirations with no realistic idea of how to achieve those aspirations. The narrow focus on the development of technical skills and fragmented knowledge reinforced through rewards and punishments are out of sync with the requirements for where the workforce is headed in the foreseeable future (Manyika et al., 2017). Dewey recommends that schools make explicit connections between the students' possible futures with the students' current aims. In the next sections, we will make predictions about the future of work followed by the implications of Dewey's philosophy for shaping education to meet the demands of the future of work.

Future of Work

From 1989 to 2012, the number of jobs requiring a bachelor's degree or higher rose by 82%, while jobs only requiring high school diplomas dropped by 14%. We now face labor shortages of 3 million workers with associate degrees or higher, and over 5 million workers with technical certificates and credentials (Georgetown Center on Education and Workforce, 2013). Of the current jobs in STEM fields, 51% are associated with computer occupations, 28% are engineering, and 13% are life and physical sciences related. Today's workforce will have to be trained to effectively integrate scientific and technological factors with political, socioeconomic, and ethical considerations to solve complex, real-world problems that face society. The future workforce will require a much more interdisciplinary, integrated skill set that includes a deeper understanding of computer technologies. Future jobs will also require a better understanding of applied concepts, including knowledge-based systems, internet networking and security, environmental sciences, and an understanding of the role of science and technology in society. We are now entering the era of the bioeconomy (National Academies of Sciences, Engineering and Medicine [NASEM], 2020). The bioeconomy is comprised of science and technology-driven activities that affect our everyday lives from food production, health care, environmental quality, and energy production.

Over the past 50 years, the integration of engineering principles and advances in computing and information science has transformed the labor force. Artificial intelligence (AI), machine learning robotics, digital fabrication, sensing, and immersive environments are altering the landscape of education, research, design, and innovation. The broad-based application of AI has launched a significant leap forward, creating software applications and robotic machines that learn from experience, make decisions, and process vast amounts of data to reach independent conclusions. The use of intelligent software and robotic machinery is impacting nearly all industries and occupations, including high-knowledge, high-skill professions, such as law and medicine. Increasing automation and AI deployment may be one of the most economically disrupting events in human civilization. The U.S. Department of Commerce reports that 40% of existing U.S. jobs could potentially be automated within the next ten years. The McKinsey Global Institute estimates that by 2030, 60% of the global economy will depend on the use of automated machines and intelligent systems in some way, and up to 375 million workers world-wide will be forced to change occupations as their current jobs are displaced or changed (Manyika et al., 2017). The World Economic Forum suggests that as manufacturing becomes more highly sophisticated, where high-skilled engineers make the industrial Internet of Things a reality, automation technologies will be a strong driver of employment and economic growth (WEF, 2016).

As a consequence, the World Economic Forum has predicted the top 10 skills that will be most prevalent in the Fourth Industrial Revolution:

1. Complex problem-solving: Developed capacities used to solve novel, ill-defined problems in complex, real-world settings.
2. Critical thinking: Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions, or approaches to problems.

3. Creativity: The ability to come up with unusual or clever ideas about a given topic or situation, or to develop creative ways to solve a problem.
4. People management: Motivating, developing, and directing people as they work, and identifying the best people for the job.
5. Coordinating with others: Adjusting actions in relation to others' actions.
6. Emotional Intelligence: Being aware of others' reactions and understanding why they react as they do.
7. Judgment and decision-making: Considering the relative costs and benefits of potential actions to choose the most appropriate one.
8. Service orientation: Actively looking for ways to help people.
9. Negotiation: Bringing others together and trying to reconcile differences.
10. Cognitive flexibility: The ability to generate or use different sets of rules for combining or grouping things in different ways.

As has been the case with past large-scale economic changes, building an automated economic future characterized by broad-based inclusive prosperity depends on the educational systems, policy, and regulatory frameworks we develop today. Preparing for a future with intelligent machines is a competitive necessity for workers and businesses. Addressing the training and education needs of workers impacted by these technologies will be essential as we transition to a more automated economy (Peters, 2017). Learning significant new skills to work with and alongside intelligent machines must become commonplace.

Immersive technologies, simulation, visualization, and geospatial data sets are creating new opportunities for education and training. Virtual reality (VR) and augmented reality (AR) provide computer-generated simulations of the real or an imagined world that can serve as a rich and engaging context for learning (Martirosov & Kopecek, 2017). Research shows that these environments facilitate training and the assessment of learning by providing a safe and low-cost setting for practice and rehearsal. Successful examples of these environments have been implemented in multiple fields with applications in medicine, industry, and education (Vaughan et al., 2016). The “immersion” and “interactivity” features these technologies provide bring new dimensions to how people learn. Immersion can be designed to facilitate experiential learning and training, where knowledge is produced through experience. Interactivity can facilitate dynamic feedback, experimentation, and exploration (Jarmon et al., 2009). Interacting with a responsive environment, where the user can navigate and modify the learning context based on their own input through spatial cues, provides another capability that can be developed for education and training. However, customization of immersive environments to individual learning patterns has not been possible until recently.

The incorporation of AI with immersive technologies has led to the development of intelligent environments with high levels of realism and interactivity to support the quality of perception, learning, and communication through natural language and reasoning (Mateus & Branch, 2017). Other advances that are making the progress of immersive learning and training possible are the increased processing speed and screen capability of handheld devices. These advances are making VR and AR technologies user-friendly and ubiquitous. Although head-mounted technologies provide a far superior immersive experience, cell phones and tablets are providing inexpensive alternatives. The possibility of adapting cell phones to VR and AR headsets by using easy-to-make cardboard cases with magnets is making immersive training accessible to many.

As the global economy pivots to an economy driven by our ability to apply technological advances to the biological systems that sustain us, the future workforce must be skilled in engineering, life sciences, computing, and information sciences and biotechnology (NASEM, 2020). The ability of the U.S. K-12 education system to engage and prepare students to study science, technology, engineering, and mathematics (STEM) at the university and postgraduate levels continues to be a concern (NASEM, 2017). If we are to train the next-generation workforce, we must attract a diverse community of students that will possess a basic understanding of how to apply and transfer STEM knowledge to a rapidly changing, globally connected society. Our future human workforce must possess higher-level thinking skills that cannot be codified by machines. They must have the ability to connect to others in direct ways that machines cannot. They must be proficient at novel and adaptive thinking that automation cannot. They must possess cross-cultural competency. They must be adept at computational thinking to translate the vast amounts of data and information into understanding and reasoning, including the ability to use critical thinking to filter out what is unimportant that machines cannot. They must be transdisciplinary in their education and training. Finally, as the current pandemic has shown, they must be able to work productively and effectively in a virtual world (Page, 2008).

Future of Education

A careful examination of the future of work and the expected skills that will underlie the Fourth Industrial Revolution provides an opportunity to reexamine the aims of education. A similar 1991 analysis of the future of work, called SCANS 2000, shaped the early foundations of the standards-based movement (U.S. Department of Labor, 1991). At the culmination of the information economy and the dawn of the internet age, the Department of Labor determined that a foundation of basic skills will enable students to develop the capacity to process information and work productively in teams to use technology to address problems. In order to achieve those goals for students, SCANS 2000 outlined three major tasks:

1. “The first task is to develop a better means of communicating, a common vocabulary to guide the conversation between the business and school communities.”

2. “The second task is to set clear-cut standards and then convince students that effort invested in meeting these standards today will be rewarded in the world of work tomorrow.”
3. “The third task is to assess and certify students’ workplace readiness so that students, their parents, and employers will know where they stand.”

(U.S. Department of Labor, 1991, 5)

The SCANS 2000 report became the basis for much of the standards and assessment work over the next three decades, with a focus on effort today will be rewarded tomorrow. The various standards initiatives tended to focus on competencies of using technology for information processing and basic skills in reading, writing, and mathematics. SCANS 2000 also included competencies in analyzing systems, interpersonal skills, and thinking skills, but those were rarely addressed in the standards.

As discussed above, the focus on preparation for the future severs the future aims from the present life of the student, relegating students only to be able to respond to stimuli. Furthermore, analyses of the future of work reveal that the foundational focus of the various standards themselves will not prepare students for the type of work they will be graduating into. Competencies in information processing are the very type of skills that will be automated (Manyika et al., 2017, p. 78). While the SCANS 2000 report included thinking and interpersonal competencies, these have been rarely assessed and implemented in the classroom (Au, 2007). However, these are the very competencies that will be most prevalent in the future of work. Five of the top ten projected competencies revolve around thinking: complex problem-solving, critical thinking, creativity, judgment and decision-making, and cognitive flexibility. The other five projected competencies revolve around interpersonal skills: people management, coordinating with others, emotional intelligence, service orientation, and negotiation. These interpersonal skills are all part of working within a community.

These future-of-work core competencies related to thinking and interpersonal skills are at the heart of Dewey's philosophy of education. For Dewey, thinking is fostered within communities. However, there is a danger that the severing of the future from the present could be recapitulated as the education system shifts to meet the needs of a future society. A focus on preparation for the future would have students practicing these competencies in hypothetical situations or in contexts that are only relevant to the present life of the child, severed from the future. In contrast, Dewey stresses the importance of connecting students' aims with important societal aims and engaging in common activity as the starting point of preparing students for a career:

> In other cases, [the child] really shares or participates in the common activity. In this case, [the child's] original impulse is modified. [The child] not merely acts in a way agreeing with the actions of others, but, in so acting, the same ideas and emotions are aroused in [the child] that animate the others.
>
> (Dewey, 1916, pp. 13–14)

Aligning students' aims with the aims of a given community is a hallmark of Dewey's philosophy. Positive emotions about a career emerge from participation in activities of importance both to the student and to the community. Starting with the alignment of aims leads to the outcomes of interest in various standards documents, but it turns current education on its head.

> As soon as [students are] possessed by the emotional attitude of the group, [their] beliefs and ideas will take a form similar to those of others in the group. [They] will also achieve pretty much the same stock of knowledge, since that knowledge is an ingredient of [their] habitual pursuits.

(Dewey, 1916, p. 14)

Dewey believes the core driver in education should be an emotional connection to communities of practice. Instead, the core driver in education today—represented by various standards documents—is increasing student achievement (at all costs). The emotional connection to communities of practice is left to school guidance counselors and informal learning environments. Even then, the financial constraint of increasing achievement often limits underprivileged schools' abilities to foster an emotional connection. Field trips to informal learning environments are often the first activities to get cut when extra money is needed for tutoring (Ripley, 2004). In contrast, Dewey would argue that fostering an emotional connection is the place to start in designing educational experiences—not an afterthought when budget allows.

The key to fostering an emotional connection to a community of practice is shared activity with members of the community (Dewey, 1916). Shared activity means that students understand the purpose of an activity and choose to engage in that activity. The goals of the community should shape the actions that students take and guide the means by which they make connections to the consequences of those actions. Making a connection between the student's actions and the consequences of those actions is what Dewey refers to as *experience*. Experience can come in the form of just knowing that an action will cause a certain effect (e.g., trial and error), but knowing how the two are connected comes from deliberate inquiry. Taking action with reference to a goal of interest to the child makes the child attuned to the consequences of that action and thus motivated to engage in inquiry. "*Thinking is thus equivalent to an explicit rendering of the intelligent element in our experience. It makes it possible to act with an end in view. It is the condition of our having aims*" (Dewey, 1916, p. 146).

A challenge in the process of thinking is balancing partiality and impartiality. As mentioned, having a vested interest in the outcome is a prerequisite to entering the process of inquiry. The emotional connection to the outcome provides the aims that drive the activity. However, maintaining impartiality about the outcomes is key to productive thinking. Otherwise, the outcome could be biased by the desires of the student.

> There is, however, no incompatibility between the fact that the occasion of reflection lies in a personal sharing in what is going on and the fact that the value of the reflection lies upon keeping one's self out of the data. The almost insurmountable difficulty of achieving this detachment is evidence that thinking originates in situations where the course of thinking is an actual part of the course of events and is designed to influence the result.
>
> (Dewey, 1916, pp. 147–148)

Having a vested interest in the outcome provides the motivation for persisting in the face of the difficulties of engaging in inquiry.

> A large part of the art of instruction lies in making the difficulty of new problems large enough to challenge thought, and small enough so that, in addition to the confusion naturally attending the novel elements, there shall be luminous familiar spots from which helpful suggestions may spring.
>
> (Dewey, 1916, p. 157)

In other words, all problem-solving involves venturing into the unknown with a foundation of what is already known. Therefore, Dewey considers all thought to be creative. Students are taking familiar ideas and shaping them in novel ways to address a problem, even though that idea may not be novel to others. Fostering thinking, as Dewey conceived of it, fosters competency and comfort with trying new approaches. thus laying the foundation for creativity as it is generally known. In other words, it will be a natural progression for students to get to the point of proposing solutions that are truly novel for society.

This process of setting challenging goals and rising to meet that challenge creates positive emotional attachment to the experience, which Csikszentmihalyi (1991) calls a state of flow. The key factor in creating a state of flow is managing the level of challenge so that it is always just above the individual's current capabilities. Participating in a challenging activity requires the individual to grow cognitively to meet that challenge, thus reinforcing the affective attachment to the experience. If the activity is a shared activity with a particular science and engineering community by using the tools of research from that community, successful accomplishment of the challenging activity moves the individual one step along the trajectory of participation within that community. Thus, understanding how students are progressing toward participation in the future economy requires an understanding of students' growth not just in cognition, but also in their emotional connection to particular communities of practice. Understanding cognitive growth and students' emotional attachment to a community of practice requires a focus not only on the cognitive demands of an activity, but also on the level of emotional experiences that an activity engenders. Dewey provides a radically different view of preparation for the future. The process of *becoming* productive adult members of society comes from supporting students in *being* fully present to shared societal aims.

An Example of Dewey-Informed Future of Education

"Will there be enough water for me when I become an adult?" Underlying this question are questions related to the amount of water and quality of water. A standards-based approach would use this question as the hook to engage students in a series of activities to learn key concepts related to chemistry and environmental sciences. A high-quality unit would have students collecting and analyzing data to draw conclusions about the question. Once students have demonstrated mastery of the targeted content, the teacher would move on to another topic with a different driving question. Very little time is typically spent cultivating the question itself or in making connections to actual communities of practice that care about that same question.

In South Florida, that is a very real question about the Everglades for scientists, environmental activists, policymakers, and many others (Gramling, 2018). It is also the case that students experience this question every year during the dry period, from winter to spring. Depending on the amount of winter rainfall, there are greater or lesser recommendations on reducing nonessential water usage (Duong, 2020). This question of whether there will be enough water provides an example of an aim that children care about and is aligned to important societal aims. While there is a temptation to sequence a series of investigations to maximize coverage of the standards, Dewey would instead encourage teachers to cultivate students' aims around this question. Students will likely start with questions that are novel to them, but well known to society. For example, "why is there a dry period in the spring?" This line of inquiry would lead to investigations of weather patterns and measuring the amount of winter rain as a means to predict the amount of available water in the spring. Subsequent inquiry may lead to investigations on how to determine what water reductions may be needed. While this question may seem straightforward from a technical perspective, it quickly becomes complicated as students would realize the variety of conflicting stakeholders that regulators must take into account. In almost any direction that students take, their inquiry will be connected to a societal community of practice that is addressing the same question.

Researchers at Florida International University's (FIU) Institute of Environment are also concerned about the freshwater in the Everglades. Their research suggests that quantity and quality of freshwater in the Everglades is not only a local problem. South Florida's freshwater supply largely comes from the Biscayne Aquifer that sits under Miami. With rise in sea level, salt water is beginning to intrude through the porous limestone that Miami is built on. The rate of the saltwater intrusion is very much affected by the Everglades. The higher the water level in the Everglades, the more that fresh water pushes back against the saltwater. Making progress in understanding the problem and recommending solutions requires volumes of data over millions of acres from ground-level sensors to aerial data. No human could process and make sense of all that data. FIU researchers are at the forefront of the future of work. They are developing AI image recognition and machine-learning techniques to process the data.

Not every grade school student in South Florida will become a researcher at FIU. However, the shared aim of conserving the fresh water in the Everglades will lead many students to recognize the problem of how to study a large-scale phenomenon. A productive use of standards documents would be to gauge how to shape the problem such that students can make progress around the shared aim of conserving water using practices from the community at a level appropriate for the student. For example, the AI4K12.org initiative has identified five big ideas in AI and is developing expectations for what students could accomplish at each grade band. In this case, the standards become subjugated to the shared end. Knowledge and competency develop as a function of the students' pursuits of aims in common with adult communities of practice, thus empowering students to contribute to societal solutions.

Future of Teacher Preparation

The reorientation of education around the cultivation of shared aims requires a reorientation for how teachers are prepared. Laurel Tanner (1997) combed the archives at the University of Chicago to document how Dewey ran his laboratory school from 1896 to 1904. At the core of the school was a developmental curriculum. Teachers connected students' current interests and aims with those of communities of practice. To accomplish that goal, teachers needed to be subject matter experts, and they needed to be able to manage student groups engaging in multiple lines of inquiry in the classroom. Teachers also needed to focus on the vertical trajectory of student development.

To be successful in a Dewey-inspired school, teachers, first and foremost, need to cultivate their own competency in thinking in the way that they will be expected to cultivate thinking in their students. One example of how to cultivate teacher inquiry is the NSF-funded research experiences for teachers (RET) program in which teachers participate in NSF-funded research projects (Russell & Hancock, 2007). Through RET fellowships, teachers work alongside a researcher to gain experience in the research process. Teachers also need experience in project management in order to foster multiple lines of inquiry within the same classroom. Since the students' learning trajectories are shaped by the alignment of their interests and the aims of communities of practice, it is also important for teachers to be rooted in their community. Research suggests that teachers are more likely to stay at a school when they are rooted in the community (Reininger, 2012). By becoming members of the community where their students live, teachers gain a deeper understanding of the connection between their students and the communities in which they live. If a teacher is not from the community in which they will be working, it is important for them to cultivate those relationships with the community to help make connections for and with their students. The success of Dewey's laboratory school over a century ago (Tanner, 1997) provides a vision for organizing schools and preparing teachers to cultivate students *being* fully present to share societal aims as a means for students *becoming* productive members of society.

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