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## Transforming Schools Using Project-Based Learning, Performance Assessment, and Common Core Standards

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# THE INTERDISCIPLINARY JOURNAL OF PROBLEM-BASED LEARNING

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## BOOK REVIEW

### *Transforming Schools Using Project-Based Learning, Performance Assessment, and Common Core Standards*

D. Mark Weiss and Brian R. Belland (Utah State University)

Lenz, B., Wells, J., & Kingston, S. (2015). *Transforming schools using project-based learning, performance assessment, and Common Core Standards*. San Francisco, CA: Jossey-Bass. 312 pp. ISBN 978-1-118-73974-7. \$29.95 (Paperback). \$19.99 (E-book).

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In *Transforming Schools Using Project-Based Learning, Performance Assessment, and Common Core Standards*, Lenz and colleagues describe how K–12 teachers can use project-based learning to address Common Core standards and help students develop skills to be successful in college and professional life. Their focus is primarily on high schools, but some of the material may be applicable to other K–12 settings. The authors remind teachers that the question to ask is not “Should I address standards or use project-based learning?” but rather “How can using project-based learning enhance my ability to address standards?” Lenz is Executive Director of the Buck Institute of Education, a nonprofit organization that helps teachers implement project-based learning, and cofounder of Envision Schools, a company that operates charter schools that use project-based learning as a central instructional approach. These diverse experiences working with teachers in both a supervisory and a consultant role are folded into the book.

#### Book Organization

The book is organized into chapters that follow an almost conversational format, as if Lenz was answering questions about how Envision schools came to be and how their system addresses common questions about educating high school students. Chapters 1 and 2 introduce how Envision schools employ backward design principles as they articulate a goal of their students graduating from both high school and college. A standards-aligned performance assessment system is designed to keep both students and faculty on task. Chapter 3 explains how project-based learning is utilized as the

means by which student performance is defined, instructed, and assessed. Chapters 4 and 5 address how school cultures and systems are gradually developed to support and maintain focus on student performance, revision as a principle of learning, and common planning time. Chapter 6 explains how school leadership is obligated to provide consistency and integrity at all layers of the organization. Lenz concludes with a call to action, suggesting that high schools can effectuate deep learning by (1) ensuring at least one deep learning experience per year for each student, (2) developing and installing a graduate profile, and (3) undertaking one structural change (Lenz, Wells, & Kingston, 2015).

#### Background of Envision Schools’ Use of Project-Based Learning

Lutz credits much of the inspiration for “Envision Schools” to Wiggins and McTigue’s ideas about backward design (Wiggins & McTighe, 2005). The idea of “backward design” begins with a clear goal and works backward from that goal step-by-step, to the alignment of daily student activities that contribute materially to the ultimate goal. In the case of Lenz and his faculty, the goal for Envision schools is that students leave their high school setting and graduate from college. With a clear target, a next step identifies the skills and competencies (i.e., a high school graduate profile) their students must possess to achieve that goal. The high school graduate profile is built upon three verbs, namely, *know*, *do* and *reflect*—an iterative process through their educational experience at Envision. First, students need to know the basics, defined as Meet the University of California A–G

requirements, pass the exit exam, demonstrate proficiency in California state standards tests, and perform well on college entrance exams. Second, students need to regularly use the core competencies required to succeed in college (i.e., inquiry, analysis, research, creative expression), use the four C's (communicate powerfully, critical thinking, collaborate productively, complete projects effectively), and complete a workplace learning experience. Third, students need to recognize and acknowledge growth, accomplishments, and successes, and revise work to proficiency (Lenz et al., 2015).

The Envision faculty sought the answers to two key questions: first, "what would the curriculum look like?" and second, "what methods promote in students the development of Envision's graduate profile?" The curriculum questions centered around how to best build on Common Core and California state standards as a means for students to achieve the graduate profile goals. Common Core guidance and state and local curriculum standards contribute to organizing the daily learning approach for their students.

As to methods, Lenz and his team concluded that project-based learning would best promote the development of the skills necessary to prepare students to graduate from college while honoring the requirement to build on state curriculum requirements. Project-based learning encourages students to select among personally relevant topics inviting them, with tutor support, to develop a strategy of tasks meant to produce a reifiable end product (Helle, Tynjälä, & Olkinuora, 2006; Savin-Baden & Major, 2004). For Envision schools, project-based learning is very broad and inclusive of student's individual talents and interests, combines state standards, and the completion of engaging projects. Students develop a portfolio of projects over their four years in their school. The ever-growing project portfolio for each student leads to the final project: an oral and written defense of their accumulated educational experience at Envision.

## Critical Factors to Envision's Implementation of Project-Based Learning

### Faculty Cooperation

If anything sets the Envision process apart, it is the willingness on the part of each faculty member to help one another as their understanding of the dynamics of project-based learning gradually grows. While cooperation sets the Envision system apart, it also makes clear that the absence of cooperation among administration and faculty reduces the chance of successful transformation of schools. However, this difficult collaboration process is made easier through a commitment to the logic of the backward design process. Faculty members are committed to their students graduating from

college. The graduate profile employed by faculty provides clear and consistent guidance as faculty support students in preparing for success by addressing the challenges they will encounter as they pursue higher education.

The faculty commitment is even more critical given the transition students must make in their first years at Envision from traditional educational approaches to a project-based, cooperative, and *graduate profile*-oriented educational experience (Johri, 2015). This entails a shift in both structure and culture. According to Lenz, culture and structure are like the chicken and the egg. When you think culture development predominates, you see holes in the structure. When you think structure is king, you see the role of culture as foundational. Lenz concludes that the only way forward is to pay equal attention to both culture and structure, to ensure that both elements contribute to the goal of students ultimately graduating from college. School culture develops over time, but according to Lenz, it is promoted by a commitment to seven key beliefs about students, teachers, and their schools: (1) ability is not fixed—through effort, it grows; (2) failure is essential to learning; (3) revision is the route to mastery; (4) knowledge deepens and expands through inquiry; (5) teaching is coaching; (6) caring is essential to accomplishment, and learning can (and should) be fun (Lenz et al., 2015, p. 103).

Faculty members also undergo a transition to a less competitive and more cooperative school environment. For example, the demand that students revise and revise and revise translates into faculty critiquing and critiquing and critiquing. Therefore, Envision schools place a high emphasis on formative assessment so that students grow step-by-step, learning that excellence demands repeated revision along with a commitment to finish.

### Performance-Based Assessment

Another defining characteristic of the Envision environment are the project presentations and products where revision is the norm. Lenz suggests that although any strategic plan has a 50/50% chance of success, faculties have a 100% chance of adjusting and growing through any experience. Therefore, while educating is a serious business, it is also true that participants need to have fun along the way. This is no less true for faculty than it is for students.

## Challenges Related to Envision's Use of Project-Based Learning

Stated in the book, but perhaps requiring more emphasis, is the day-to-day faculty sharing required to grow and maintain both the culture and processes that lead to students developing the skills and knowledge outlined by Envision's graduate profile. Students attending Envision schools can range from

high performing to rebellious; they come to Envision with a varying capacity for self-direction. Some students arrive at Envision with social and emotional challenges. Teachers themselves have various levels of experience in dealing with student dynamics. In addition, Envision faculty members experience a daily process of sharing and learning from one another. Some faculty members may not be acquainted or comfortable with frequent faculty interactions. Further, frequent faculty interactions often include decisions about how to respond to colleagues in what are often highly charged and consequential situations where student lives are in the balance.

## Benefits of the Book

The book is generous with examples of curriculum choices, examples of teacher and student teams, project-based scheduling, teacher advisory meetings, parent-teacher advisory meetings, and the professional development of the faculty. An accompanying DVD includes 21 authentic videos where both students and teachers describe key elements of the “Envision way.” Sample documents include templates, task requirements, portfolio assessment tools, planning tools, and a variety of student support templates.

## Summary

Education has been under scrutiny for decades to improve learning outcomes with less money and resources, for a wider range of students and teachers, with increasing class sizes. Envision has set a stake in the ground by virtue of the graduate profile, making it clear what success looks like in their school for each enrolled student. Lenz proposed that state and local standards be used as a means by which students develop skills and competencies necessary for college graduation rather than pitting standards and methods against each other. While some educational approaches work well with existing curricular demands, others do not. The Envision approach successfully blends state and local requirements with a common sense

approach to education. While the demands on faculty may be different, according to Lenz, they are more than worth it.

*Transforming Schools Using Project-Based Learning* is compelling as each chapter builds on the previous one so readers can experience with the author a shared understanding of the goals, purposes, methods, and assumptions associated with the Envision schools approach. Project-based learning is painted with many examples, both written and in the provided media, so that exploring further for practical samples is both rewarding and enjoyable. While increasing the frequency of references to current research and theory would further strengthen the book, the provided references quite easily open the door to additional inquiry. Further, the reader is motivated to do so, given the unique combining of common core standards, state curriculum requirements, a student centered approach, project-based learning, and a clear stake in the ground emphasizing year-by-year portfolio generation and a concluding formal student defense of their body of work. Lenz and colleagues have introduced an enjoyable, provocative, and yet common sense description of an approach to education that benefits both students and faculty.

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