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THE INTERDISCIPLINARY JOURNAL OF PROBLEM-BASED LEARNING

BOOK REVIEW

Creating Cultures of Thinking: The 8 Forces We Must Master to Truly Transform Our Schools

Sharon F. Dole (Western Carolina University)

Ritchhart, R. (2015). *Creating cultures of thinking: The 8 forces we must master to truly transform our schools*. San Francisco, CA: Jossey-Bass. 384 pp. ISBN 978-1118974605. \$29.95 (Paperback). \$19.99 (E-book).

Keywords: classroom culture, thinking skills, inquiry, communication, transforming schools

Ron Ritchhart's latest book, *Creating Cultures of Thinking: The 8 Forces We Must Master to Truly Transform Our Schools*, explores his research on the role of classroom culture in nurturing the development of thinking skills in students. The book is relevant for teachers and designers of problem-based learning (PBL) and builds on the author's work about authentic engagement that leads to deeper understanding (2009).

Authentic engagement, as described by Ritchhart and based partly on the work of Newman (Newman, Bryk, & Nagaoka, 2001), includes novel application, meaningful inquiry, effective communication, and purposeful reach.

The book stems from much of the author's earlier work. Ritchhart, a senior research associate at Harvard University's Project Zero, published *Intellectual Character: What It Is, How to Get It, and Why It Matters* in 2002, in which he presented a view of intelligence that is broader and deeper than scores on tests. *Making Thinking Visible*, published in 2011 and co-authored with Mark Church and Karin Morrison, documents the use of thinking routines that scaffold and enhance students' thinking. His latest book, *Creating Cultures of Thinking: The 8 Forces We Must Master to Truly Transform Our Schools*, builds on the following core ideas presented in Ritchhart's earlier books: the fundamental goal of schools must be about developing students' thinking skills, students' thinking should be visible, and the role of classroom culture is essential in supporting students' learning. The book is unique in that the chapters combine years of research with practical examples demonstrated in case studies. In Ritchhart's book they are used to demonstrate the eight forces we must master to transform our schools. One example of a case study in the book is in chapter 8 where Erika and Julie, special education teachers, empower their disenfranchised students

by using a game to develop their confidence as readers, as well as to develop leadership skills. The students take on leadership roles related to the reading comprehension strategies, including summarizer, visualizer, vocabulary master, questioner, clarifier, and predictor. The case study approach thus helps explore the application of Ritchhart's work in unique contexts.

The book is divided into four sections: "The Introduction"; "Demystifying Group and Organizational Culture" (chapter 1); "Purpose and Promise of Schools" (chapters 2 through 9); and "Moving toward Transformation" (chapter 10). The introduction lays the foundation for the remainder of the book. In this chapter, Ritchhart draws the reader in by asking her to reflect on a time when she has been a part of a culture of thinking and to list the specific practices that sustained and advanced her group. The author then lists the common responses to this question from his research and asks the reader to compare that list with her own list. Ritchhart concludes the introduction by giving a brief description of each chapter. Those doing research on PBL may be interested in the fact that his work on cultures of thinking is international; it extends to Australia and European countries as well as the United States.

In chapter 1, "The Purpose and Promise of Schools," Ritchhart makes the case for a new vision of a quality education, one that goes beyond testing. In many ways, this aligns with the vision of PBL as Ritchhart discovered in questioning parents, teachers, and administrators all over the world on what they want children to be like as adults. They include non-academic qualities that drive learning (e.g., curiosity and questioning); and facilitate innovation such as creativity (e.g., problem solving and risk taking), collaborative skills (e.g., empathy, good listening), and the ability to deal with complexity (e.g., analysis

and critical thinking). Once again, these qualities are similar to those discussed by PBL theorists like Barrows (1985), Hmelo-Silver (2013), and Savery (2006). That said, Ritchhart adopts different terminology and refers to these qualities as dispositions or traits of a person that motivate his or her behavior. He maintains that dispositions must be learned through immersion in a culture. How this enculturation is accomplished in schools is described in the eight chapters following the introduction.

Chapters 2 through 9 are all interrelated and describe the following eight cultural forces:

- *Expectations*: Recognizing How Our Beliefs Shape Our Behavior (chapter 2)
- *Language*: Appreciating Its Subtle Yet Profound Power (chapter 3)
- *Time*: Learning to Be Its Master Rather Than Its Victim (chapter 4)
- *Modeling*: Seeing Ourselves through Our Students' Eyes (chapter 5)
- *Opportunities*: Crafting the Vehicles for Learning (chapter 6)
- *Routines*: Supporting and Scaffolding Learning and Thinking (chapter 7)
- *Interactions*: Forging Relationships That Empower Learners (chapter 8)
- *Environment*: Using Space to Support Learning and Thinking (chapter 9)

Each of these chapters begins with a definition of the concept and what its role is in the shaping of culture. Ritchhart explores the five belief sets that can facilitate a culture of thinking in chapter 2: (1) focusing students on the learning vs. the work; (2) teaching for understanding vs. knowledge; (3) encouraging deep vs. surface learning strategies; (4) promoting independence vs. dependence; and (5) developing a growth vs. a mixed mindset (p. 42). The chapter opens with a case study of a teacher who believes that her practices are encouraging a culture of thinking when, in actuality, they are inhibiting it. The remainder of the chapter guides the reader through the rich research around each belief set. For example, in the section on teaching for understanding vs. knowledge, Ritchhart draws on research conducted by the Harvard Graduate School in the 1990s that resulted in the model known as the Teaching for Understanding (TfU) framework. By including the case study at the beginning of the chapter, the reader is able to see how the concept actually works in practice. Once again, this is helpful to PBL teachers and researchers because it demonstrates authentic practices.

Chapter 3, the chapter on language, presents specific examples of a teacher facilitating deeper thinking in her students through the use of discourse. The author draws on the

research in several fields associated with language to describe what he calls key “language moves” (p. 67) that can promote a culture of thinking: the language of thinking, the language of community, the language of identity, the language of initiative, the language of mindfulness, the language of praise and feedback, and the language of listening. This interdisciplinary view of language is helpful to educators and researchers of PBL as it views the different functions of language, including the cognitive, psychological, and social as well as linguistic. An example of the use of the language of community in the case study is when Lisa, the teacher in the case study, asks the class, “What do *we* see?” in a photograph that she holds up (p. 64). The use of the word “we” in place of “you” implies that the class is working on this together. In doing so, the book differentiates itself from many others in that it gives real life examples of the power of language.

In chapter 4, Ritchhart discusses five key concepts about time based on his own studies and the research of others, including Covey (1994), Taylor (2005), Gettinger and Walter (2012), Silva (2007), Rowe (1986), and Paul (2013). The concepts are the following: (1) recognizing time as a statement of one’s values (Covey, 1994; Taylor, 2005), (2) learning to prioritize and always prioritizing learning (Gettinger & Walter, 2012; Silva, 2007), (3) giving thinking time (Rowe, 1986), (4) investing in time to make time (Paul, 2013), and (5) managing energy, not time (Covey, 1994).

The author also discusses the five key concepts of time through the description of the use of time by Nathan, the teacher in the case study. Nathan does not use classroom time for lecturing or dispensing information that will be on his 12th grade students’ high stakes test at the end of the year. During classroom time, students are actively engaged in learning rather than listening to lectures. When he needs to give the students information, Nathan gives it by way of notes or video. Nathan uses an Individual Feedback Session (IFS) to give feedback on each student’s writing (Armstrong, 2012). These sessions take place weekly at a mutually agreed upon time before or after school, during lunchtime, or during free time. Students bring their written work, which is due on the day of the IFS, and Nathan writes grades and comments on their writing. The students record the sessions on their phones or take written notes and then goals are set for the next session. Ritchhart observed that in these sessions Nathan not only creates powerful learning opportunities for the students but also develops relationships with them.

Chapter 5, on the topic of modeling, is similar to the previous chapters in that it begins with a case study of a teacher. The reader encounters Natalie, the teacher, presenting herself as a thinker and learner to her students as she describes her thoughts upon awakening in the middle of the night and

jotting down her thoughts in her journal. Natalie demonstrates what Ritchhart calls implicit modeling, as opposed to explicit modeling, when she models her own messy journal to her students that shows her highlights, side notes, and the use of a red pen. Building on his earlier studies and the research of others and using Natalie to demonstrate, Ritchhart describes a range of modeling practices. He identifies those as the following: (1) dispositional apprenticeship: being a role model of learning and thinking (Tosteson, 1979); (2) cognitive apprenticeship: making our thinking visible (Brown, Collins, & Duguid, 1989); (3) gradual release of responsibility: modeling for independence (Palinscar & Brown, 1984); and (4) interactive modeling: learning from examples, practice, and reflection.

Chapter 6 deals with creating opportunities for students to learn, the 5th cultural force. Richhart proposes that we think of teaching in terms of opportunities rather than lessons, assignments, and tasks by asking the following questions: “Does it [the process of learning] challenge? Does it require them [the students] to think? What resources will be marshaled and how? How will information, content, and knowledge be processed to produce something new and original (p. 143)?” David, a teacher of 9th grade geography and the teacher in the case study of this chapter, tells his students that they are geographers and they need to think as geographers. Similar to PBL that deals with authentic, real-world problems, David involves his students in the real work of the discipline of geography.

One of the thinking routines, the topic of chapter 7, that Ritchhart describes is Claim-Support-Question (CSQ), which is being used by mathematics teachers at Bialik College, a private school in Australia that is the major site for his previous research. The case study approach is beneficial for understanding this thinking routine because the reader is able to see the following process at work: (1) making a claim about the topic such as an interpretation or a prediction, (2) identifying support for the claim, and (3) asking a question related to the claim. CSQ is very similar to the “pushing for explanations” strategy in the Barrows PBL Model (Hmelo-Silver & Barrows, 2006). In pushing for explanations, the facilitator pushes a student for an explanation without evaluating or offering additional information, thus achieving the goal of making the student aware of his or her knowledge limitations. Both the Barrows Model and the Cultures of Thinking Model subscribe to making thinking routines visible (Hmelo-Silver & Barrows, 2006; Ritchhart, Church, & Morrison, 2011).

Chapter 8, “Interactions,” recounts the research on the importance of social-emotional learning. The author cites recent research that has shown that positive teacher-student relationships support academic achievement, especially critical

thinking (Mathews & Lowe, 2011; Stupnisky et al., 2008). The author agrees with Bondy and Ross (2008) that teachers can be “warm demanders”; that is, press students on their thinking but at the same time show empathy and support. This chapter compliments the other chapters in that it shows the critical role the teacher-student relationship plays as a culture shaper.

Designers, in particular, may appreciate chapter 9, which is on classroom environment. In this chapter, the reader learns about how teachers have redesigned their classrooms and views the photographs of spaces that are ideal for learning, comfort, and making students’ thinking processes and products visible. The reader encounters three different classrooms in the chapter, each inviting students, parents, colleagues, and visitors alike. This chapter is beneficial to PBL practitioners as well as designers because environment is not often discussed in the PBL educational literature on K–12.

Chapter 10, “Moving toward Transformation,” presents six case studies of school leaders involved in the transformation toward a culture of thinking. These case studies demonstrate that creating a culture of thinking is not a one-time stab at professional development but an ongoing process toward an overall goal. Once again, this is similar to PBL research in that clearly stated goals help direct the learners, whether they are students or teachers, resulting in increased learning outcomes through authentic learning. The case studies also show how important it is to empower teachers to collectively take charge of their own transformation toward creating a school-wide culture of thinking.

Most of the schools in the case studies began with implementing thinking routines, but this was merely the beginning of the transformation. Although many concepts were discussed, the common themes across all of the case studies in chapter 10 were leadership, time, documentation, and ownership. As described in the chapter, transforming a school into a culture of thinking is a multiyear process, so it is important to set yearly goals as well as an overall goal. Documentation refers to using videos and written reflections to show the process of transformation. Finally, it is critical that the teachers at the grass roots level are empowered to take ownership of creating a culture of thinking in their schools.

Creating Cultures of Thinking: The 8 Forces We Must Master to Truly Transform Our Schools is an exceptional book and relevant to the broader discussion of PBL because of the common elements. In fact, a critique of the book is that there are no references to PBL or other inquiry-based curriculum models, in spite of the similarities. That being said, the book is more appropriate for K–12 educators and researchers of PBL than for those in higher education. The comprehensive research on which the concepts of the book is built is important in its own right because

it provides history and background information. In addition, the appendix contains eight practical resources such as checklists and protocols for teachers to aid them in creating cultures of thinking in their own classrooms. At a time when public education is being assaulted at all levels, this book is a powerful vision of what K–12 schools could and should become in the 21st century.

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