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Sean Kelly

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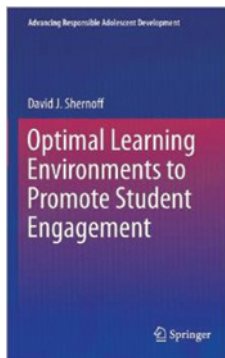
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Toward an Optimal Learning Environment: Studies of Engagement at the Moment of Instruction

Optimal Learning Environments to Promote Student Engagement. David Shernoff. New York: Springer, 2013. 368 pp., \$179.00 (hardcover). ISBN: 9781461470892

Sean Kelly
University of Pittsburgh, Pittsburgh,
Pennsylvania



In *Optimal Learning Environments to Promote Student Engagement* (2013), David Shernoff provides a succinct and compelling framework for engaging students; an optimal learning environment is one character-

ized by appropriately high task challenges and expectations for mastery, combined with motivational and emotional support. In advancing this perspective, *Optimal Learning Environments* uses an organizing theoretical framework from positive psychology, the *flow* theory of Mihaly Csikszentmihalyi. For more than a decade, Shernoff and his colleagues have applied flow theory to understanding engagement in the classroom, and much of that research is summarized in *Optimal Learning Environments*. Although there are many points of congruence between Shernoff's conceptualization of engagement and existing theories in psychology, sociology, and subject matter-based instructional research, the flow-based model used by Shernoff proves to be uniquely well suited to classroom-based research. In addition, the reader will find that throughout *Optimal Learning Environments*, Shernoff is exceptionally

attentive to, and realistic about, the way teachers approach the difficult task of engaging students in today's competitively oriented schools. I would emphasize that for practitioners, Shernoff's recommendations are not a call for unsustainable, "heroic" teaching—the scenarios and real-world case studies he uses to illustrate engaging learning environments are imminently within reach of the skilled educator. I found Shernoff's vision of engaging instruction to be simultaneously grand and transformative, but also realistic.

Shernoff conceptualizes student engagement as the simultaneous occurrence of interest, concentration, and enjoyment. As with prior frameworks (e.g., Fredericks, Blumenfeld, & Paris, 2004; National Research Council and Institute of Medicine, 2004; Newmann, Wehlage, & Lamborn, 1992), it is a jointly behavioral, cognitive, and affective construct. It also has much in common with psychological understandings of internalized perceptions of competence (i.e., self-efficacy, academic self-concept) as well as achievement goal theory. A heightened state of engagement or flow occurs when tasks present the right amount of challenge: too easy and the result is boredom, too hard and the result is anxiety. Likewise, when mastery of the task itself is intrinsically meaningful to students, they are more likely to be genuinely engaged. Consequently, tests and other performance-oriented tasks tend to produce a lesser form of engagement where some amount of concentration and effort occurs, but without genuine interest or enjoyment. Where flow theory departs from related theories of motivation and engagement is in seeing engagement as fundamentally an emergent property of the day-to-day quality of experience and relationships that a student has. That is, a student becomes engaged through the

gradual accumulation of flow experiences, or disengaged by learning environments that persistently elicit boredom or anxiety. Rather than see engagement in a task as being elicited by a motivational state (although not to dismiss that is certainly often the case), Shernoff places emphasis on the experience of the task itself as supported by the teacher. Early in *Optimal Learning Environments*, Shernoff delineates many of the larger social forces and educational policies that stack the odds against creating optimal learning environments, and summarizes just how disturbingly pervasive student disengagement is, but the flow perspective on engagement is fundamentally optimistic about educational reform. Despite constraints, there are ways that schools and teachers can promote engagement.

In Chapter 5, Shernoff reviews the literature on the relationship between students' sociodemographic background, level of achievement, and engagement. Chapter 5 dispels many popular myths about student engagement (e.g., beliefs about minority student engagement) and discusses the relationship between the achievement level a student begins the school year with and their subsequent engagement in the competitive world of schools. Shernoff balances the literature on the negative effects of a culture of competition in schools with a discussion of the positive motivational and engaging qualities of competition. Shernoff notes that some amount of competition is embedded in flow theory: competition is typically interactive, provides immediate feedback, and offers an opportunity to try to build off of one's skills. Elsewhere in the book (p. 135), Shernoff provides a detailed example of a competitive, and highly engaging, instructional episode from his team's research. How competition affects

engagement in classroom settings is one of the “big questions” in engagement research and should receive greater attention in future research efforts (see, e.g., research on performance goals; e.g., Harackiewicz, Pintrich, Barron, Elliot, & Thrash, 2002).

Chapters 6 and 7 provide an overview of how teachers can work to create an optimally engaging learning environment. The conclusions in these chapters come from studies by Shernoff and his colleagues pairing experience sampling method (ESM) data with video-taped observations of instructional practice. In the experience sampling method, students are prompted (by a wristwatch-type beeper) to provide moment-in-time information about their level of concentration, interest, and enjoyment. If this strikes the reader as a somewhat unorthodox measurement approach, consider the difficulty of identifying not just a student’s overall alignment to school but the level of engagement elicited by specific instructional episodes. The ESM approach provides a powerful lens for studying the effects of classroom instruction on engagement. Using this approach, Shernoff and his colleagues have found that meaningful engagement is elicited most frequently when the classroom provides students with challenging tasks and high expectations, combined with a supportive relationship between the teacher and student, and among peers. Indeed, Shernoff argues in Chapter 7 that engagement is not primarily a function of generic elements of task structure (e.g., whether students work individually, in small groups, or as a whole class), but rather occurs when teachers create a sense of community, belonging, and support. I found the conceptual model of optimal learning environments presented in these chapters to be highly compelling, with one exception: Shernoff neglects to prioritize the role of sustained, ongoing inquiry, a principle of engagement that teachers in science and vocational education often build on when developing extended classroom projects that span multiple sessions or even weeks (see, e.g., Anderson, 2003).

In Chapter 8, Shernoff considers engagement in the context of specific subjects. The overarching theme of this chapter is that much instruction in secondary schools is developmentally inappropriate; students should be actively “doing” history, science, etc., rather than merely reading

about it or listening to a lecture. ESM research suggests further that specific subject matter areas often have some engaging elements, but are simultaneously lacking in others. For example, Shernoff finds that students rarely encounter instruction that has a high degree of future relevance and that is simultaneously highly enjoyable. Based on ESM findings that consistently show high levels of challenge, concentration, and perceived importance in mathematics, Shernoff concludes that the primary challenges facing math teachers is to keep instruction lively and enjoyable, while ensuring students have opportunities to experience success. In contrast, in elective subjects such as art, students often experience enjoyment, but concentration and effort may be hindered by a lack of perceived importance.

In the remainder of *Optimal Learning Environments* (Chapters 9–15), Shernoff broadens his lens of analysis to include whole school models of reform, after-school programs, out-of-school engagement, and the potential of new technological developments for engaging students. In addition to ESM studies of engagement, Chapters 9–15 contain insights from reviews of existing literature, as well as portraits of innovative schools. While there is much of value in these chapters, I found the insights from Shernoff and Vandell’s (Shernoff & Vandell, 2007; Vandell et al., 2005) research on engagement in after-school programs to be most compelling. As Shernoff notes, school-based programs often occur in the same place, with overlapping students and staff, and yet many students are substantially more engaged during after-school programs than during regular classroom instruction. Educators should endeavor to understand the conditions that generate engagement in after-school programs and strive to create similar conditions in the classroom. One common element of engaging after-school experiences is that they are highly interactive, with school staff taking on a supervisory rather than a didactic role.

Optimal Learning Environments to Promote Student Engagement is an impressive text; it is a handbook for educational researchers seeking to understand the fundamental determinants and consequences of engagement that simultaneously gives

clear and compelling guidance to practitioners. For researchers though, an unfortunate side effect of the comprehensive scope of the text is that Shernoff rarely slows down to interrogate the quality of the research evidence (Chapter 6 an exception). Shernoff’s overall model of engagement is well supported by research, but the reader is left on their own to investigate the robustness of the knowledge base on more specific topics. In addition, many readers who have primarily relied on survey, interview, or observational methods of research will wonder about the limits and possibilities of the ESM approach in understanding engagement. In what research or instructional improvement settings is the ESM approach most successful or most limited? This raises a more general concern with studies of student engagement as a field; there is little consensus on how to measure student engagement, and to a lesser extent, even on the fundamental dimensions of student engagement (e.g., should *cognitive strategies* employed by students be considered a form of engagement?). I would argue that in the long run, this lack of consensus will be scientifically fruitful to the extent that it encourages experimentation and multiple approaches to measurement. Shernoff and colleagues’ most recent studies combining the ESM approach with observational methods is a model for future research to build on.

In the current era of standards-based reform, which often seems to focus entirely on the cognitive demands of instruction rather than on instruction that generates sustained student engagement and interest in school and learning, *Optimal Learning Environments* is an important new book. The theory and evidence on learning environments that produce widespread engagement, so thoroughly developed in this text and clearly presented by Shernoff, are invaluable assets in any school reform effort.

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AUTHOR

SEAN KELLY, PhD, is assistant professor of Administrative and Policy Studies at the University of Pittsburgh, 4308 Posvar Hall, 230 South Bouquet Street, Pittsburgh, PA 15260; spkelly@pitt.edu. His research focuses on tracking, student engagement, and teacher quality.