Handbook of Positive Psychology in Schools
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FLOW IN SCHOOLS REVISITED
Cultivating Engaged Learners and Optimal Learning Environments

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INTRODUCTION

Public schools are continually characterized by pervasive boredom (Goodlad, 1984; Steinberg, Brown, & Dornbusch, 1996). For example, the 2009 High School Survey of Student Engagement found that two thirds (66%) of students reported being bored at least every day in high school, and approximately one in six students (17%) was bored in every class (Yazzie-Mintz, 2010). Of concern to teachers for decades (Pickens, 2007; Singh, Granville, & Dika, 2002; Theobald, 2006), boredom and apathy in class are primary reasons that many students do not become engaged in school (Pekrun, Goetz, Daniels, Titz, & Perry, 2010). Studies have reported that disengagement is strongly related to poor attendance and dropout, substance abuse, and criminal offending (Connors & Pope, 2014; Henry, Knight & Thornberry, 2011). Pervasive student disengagement is both a national and an international problem, with 20 to 25% of students in 28 OECD countries (i.e., those belonging to the Organisation for Economic Co-operation) classified as having low participation and/or a low sense of belonging (Wills, 2003).

Schools have historically struggled to provide meaningful and engaging experiences for many youth. Many students in public schools see themselves as passive participants in a mass, anonymous educational system (Larson & Richards, 1991). Accordingly, fostering
engagement and enjoyment in learning has become a dominant concern for educators, researchers, policy makers, and other stakeholders of the U.S. public school system. Yet many students remain apathetic toward school.

Can positive psychology foster healthier schools with its focus on optimal health and human functioning rather than illness? The concept of optimal experience, or flow, has served as a theoretical cornerstone of positive psychology ( Seligman & Csikszentmihalyi, 2000). In this chapter, we focus on how optimal learning experiences are theoretically rooted in the concept of flow and direct meaningful application to student engagement in schools. Our review, guided by multiple studies bearing on this topic in the last 20 years, specifically focuses on the perceptual and environmental factors that can influence student engagement and their resultant outcomes. We also highlight several promising contexts for fostering optimal experiences and engaged learning before closing with some new directions in this line of research.

FLOW IN LEARNING

By interviewing individuals from diverse backgrounds about their peak experiences, Csikszentmihalyi (1990) and colleagues identified the phenomenological characteristics of the most meaningful and satisfying moments in people’s lives. From rock climbers and chess players to accomplished scientists and artists, optimal experiences in diverse activities were often described in similar terms: intense concentration and absorption in an activity with no psychic energy left over for distractions, a merging of awareness with action, a feeling of control, loss of self-consciousness, and a contraction of the normal sense of time (i.e., time seems to fly). Csikszentmihalyi subsequently coined the term “flow” to describe experiences when skillful and successful action seems effortless, even when a great deal of physical or mental energy is exerted. Subsequent research on flow finds that the experience is enhanced by certain properties of the task. Specifically, in most flow activities, goals are clear, and feedback with respect to meeting those goals is immediate and forthcoming. The activities also are often autotelic, or a goal in and of itself performed for the sheer experience of it—sometimes even in the face of personal risk or danger. Perhaps the most central condition for flow experiences to occur is that the challenge of the activity is well matched to the individual’s skills. Typically, the challenge and skill are high and in balance—individuals stretch their skills to their limits in pursuit of a challenging goal. The various combinations of high or low challenges and skills predict distinct psychological states: (a) absorbtivity, resulting from low challenge and low skill; (b) relaxation, resulting from high skill but low challenge; (c) anxiety, resulting from high challenge but low skill; and (d) flow, resulting from high challenge combined with high skill. This model later evolved into one with eight flow channels including four intermediary or transitional states between these four quadrants (see Strati, Sheronoff, & Kacker, 2012); however, we discuss only the four quadrants here for simplicity.

As concrete examples of these states, an intermediate-level female skier may find herself in apathy waiting in line at the ski lift before any challenge is present. Once on the mountain, if the first slope is a bunny trail, she finds she has more skills than required and feels only relaxation as she takes in the scenery. Later in the day, when confronted with a slope that is too steep, bumpy, or icy for her ability, anxiety sets in until she safely navigates her way down. Only on her favorite slopes that are quite challenging for her ability, but not excessively so, does she feel herself enter into an enjoyable, rhythmic peak experience in which time seems to stand still. The exhilaration of these flow experiences is typically the main reason skiers invest the time, money, and energy to hit the slopes in the first place (Csikszentmihalyi, 1990).

Flow experiences can involve mental tasks as much as physical ones. Anyone who has been “sucked into” a good novel that could not be set down implicitly understands the phenomenon. Recent experiments in neuroscience have demonstrated that when a reader is fully engrossed in a novel, the human brain is activated not only in areas responsible for attention; it also dramatically “lights up” in areas controlling affect and emotion (Thompson & Veldman, 2012). Still, an experienced reader is unlikely to enter flow reading a children’s book. A more sophisticated novel not only appeals to one’s reading ability but also stimulates a full array of skills to understand the geographical and historical context, infer the motivations of the characters, or solve the central mystery. The relation between flow and the balance of challenge and skills has been empirically supported in numerous settings (e.g., Csikszentmihalyi & Csikszentmihalyi, 1988).

The theory of flow, then, is inherently related to learning. When learning a new skill, the challenge of even a basic task may exceed a student’s beginning level of ability, and hence one may feel overwhelmed. Even “Twinkle, Twinkle Little Star” may be too difficult for a beginner pianist. To reach flow, the level of skill must increase to match the challenge. Much like Yngstsky’s (1978) zone of proximal development, the level at which most learning occurs is just one step beyond the skills one has already mastered. In this case, sufficient practice may be needed until the song is mastered. Once the song is played comfortably with relative ease (causing a state of “relaxation”), only one thing can restart a cycle of fresh learning: a new song at a higher level of challenge, causing one’s skill to increase yet again. Thus, the pianist may progress through increasingly difficult songs at ever-higher levels of skill. Flow is expected to peak at the highest level of challenge and skill, as when a master pianist is playing a Mozart concerto with great poise and skill. Fallagar, Knight, and Sovrin (2013) found that the balance between the challenge of a passage of music and the skills utilized to play the passage is significantly and consistently correlated with optimal experience. This balance of challenge and skills increases motivation, enhances competence, fosters growth, and extends the student’s capacities (Csikszentmihalyi, Abuhamed, & Nakamura, 2005; Fallagar et al., 2013).

Also applicable to learning is the finding that flow activities tend to be selected and replicated over time because they are so gratifying. This process of psychological selection plays a crucial role in the development of specific interests, goals, and talents over the course of one’s life (Delle Fave & Massimini, 2003).

MEASURING FLOW AND ENGAGEMENT IN LEARNING

In the last 25 years, the study of flow has been pursued mainly through the use of the experience sampling method (or ESM; Hektner, Schmidt, & Csikszentmihalyi, 2007). Respondents carry a paging device (traditionally a programmable wristwatch, but more recently smartphones and pagers), which signals them at random moments throughout the day. Each time a respondent is signaled, he or she completes a brief questionnaire.
studies have shown that students experience greater enjoyment, motivation, self-esteem, and engagement when they perceive themselves to be active, in control, and skilled in the activity or subject at hand (Shernoff, 2010b; Shernoff et al., 2003). Consistent with flow theory, these findings suggest that students are more likely to become engaged when academic work intellectually involves them in active processes of meaningful inquiry (Newmann, Wehlage, & Lamborn, 1992). Furthermore, such findings suggest that the perception of competence and autonomy contributes to students’ engagement, likely by increasing self-efficacy and perceptions of self-worth as suggested in much of the motivational literature (e.g., Schunk, Pintrich, & Meece, 2008).

Flow and Learning Goals

Learning goal orientation refers to students’ purposes for engaging in their learning activities. Mastery goal orientation is defined as a focus on mastering a task according to self-set standards or for improvement. Alternatively, a performance goal orientation represents a focus on demonstrating ability or competence according to how one will be judged by others (Ames, 1992; Elliott & Dweck, 1988). Students’ goal orientation is recognized to be crucial to academic engagement (Marrin, Marsh, Debus, & Malmberg, 2008).

Sharifah, Habibah, Samsiah, and Sidek (2011) investigated the potential of learning goals to influence flow among high school students in Malaysia. Results of the study demonstrated that mastery goals made a significant contribution to explaining flow, whereas performance goals were not a significant predictor of flow. While recognizing that performance goals can have a beneficial role in learning, the researchers emphasized promoting mastery goals as the main ingredient for students to become highly engaged in their learning tasks.

The Influence of Classroom Context and the Learning Environment

Student engagement appears to be significantly influenced by contextual and classroom factors, such as instructional format and learning environment. For example, students have more engagement when doing group and individual work than while listening to a lecture or watching TV or a video. Overall, students reported being more engaged during instructional methods that present opportunities for action and to demonstrate their skills (Shernoff, Knauth, & Makris, 2000).

More recent studies further clarify the importance of instructional format. For example, in a study of seven academic classes in two schools in which interactions in high school classrooms across a variety of academic subjects were videotaped and matched to ESM data, some of the highest levels of engagement were reported during lecture formats, provided that they involved Socratic questioning, while some of the lowest levels of engagement were reported during large-group discussions that featured a high level of discourse (Shernoff, Tonks, Anderson, & Dorch, 2011; Shernoff, Tonks, & Anderson, 2014). Results support the proposition that more specific, qualifying instructional features, such as rules, goals of the activity, and quality of the learning environment were more operative in influencing student engagement than the main instructional format. As one concrete example, "interactive presentations" in which the instructor frequently asked questions were generally more engaging than "lectures" in which students were not
actively questioned. In line with these findings, another recent study found that messages teachers send to students specifically about the learning goal (i.e., performance or mastery goal) of a given instructional format have a greater impact on student engagement than the format itself (Zaleski, 2012).

Constructivist classroom principles such as reciprocal instruction, cooperative learning, and a supportive classroom climate are believed to shape students’ experiences (Zhang, Scardamalia, Reeve, & Mesina, 2009). Thus, the extent to which the learning environment, characterized as a whole, predicted fluctuations in engagement was also examined by Shernoff and colleagues (2011, 2013). Motivational characteristics of the learning environment in high school classrooms were coded from an observational instrument and matched to ESM data. The primary characteristic of optimal learning environments, in which engagement was high, was the environmental complexity, or the simultaneous combination of environmental challenge and environmental support. Environmental challenge was characterized by the importance of the instructional activity and the clarity of its goals. Environmental support was characterized by support for motivational drives (for example, support of the learner’s sense of autonomy or perceived competency), the availability of performance feedback, and positive relationships with teachers and peers. Therefore, when students believed that what they were doing was both important and had clear goals, they were more likely to interact within the classroom environment with interest and absorb what is available in the environment. When they additionally were supported to reach those goals, both emotionally and with timely performance feedback, they adopted an attitude of excitement, fun, and interest in learning.

**Engagement and Educational Outcomes**

Some studies on adolescents shed light on how the quality of experience in learning activities affects short-term and long-term educational outcomes. With respect to short-term outcomes, recent research has shown a significant positive relation between student engagement and reported grades in the same academic year after controlling for background characteristics (Shernoff & Schmidt, 2008). Several other studies have found that high-achieving, adolescent-aged students who develop their talents in specific domains are more likely to be in flow when working in their area of talent development than lower-achieving students (Csikszentmihalyi et al., 1993; Nakamura, 1988).

In order to examine longer-term outcomes associated with engagement in high school, researchers interviewed a sample of college students several years after participating in an ESM study in high school (Shernoff & Hooghstra, 2001). After accounting for student background characteristics in including academic performance, engagement was a significant predictor of continuing motivation in science. Enjoyment and interest "in the moment" during high school science class were significant predictors of choosing a science-related major in college. In addition, student engagement in high school math and science classes was the strongest predictor of reported grades in college compared to a variety of individual background characteristics—for example, stronger than grades in high school. These findings suggest that spontaneous engagement with school learning may operate in subtle ways that have important, long-term effects on students’ intellectual and professional development.

**Conceptual Model of Student Engagement and Optimal Learning Environments**

Based on previous ESM studies (Shernoff, 2010b; Shernoff et al., 2003), the two separate processes that describe the formation of meaningful student engagement are (a) academic intensity, which refers to heightened concentration and effort in skill-building activities (e.g., taking a test or a quiz, or completing tasks in math class in which students are usually very challenged and concentrate hard) and (b) positive emotional response, which refers to spontaneous enjoyment undergirding intrinsic interest and continued motivation (e.g., watching a video, attending an art class, or other activity that students find enjoyable). Consistent with the notion of flow as combining both work-like and play-like aspects of engagement, researchers have found that both processes are integral parts of optimal engagement in the learning process, but they seldom operate together during school instruction (Csikszentmihalyi & Schneider, 2000; Rathunde, 1993).

Activities or environments that can combine both aspects of engagement, as is not uncommon during individual work in computer science class or a group lab activity in science class, are of utmost importance, however, because they provide opportunities for meaningful engagement (Shernoff et al., 2011). Optimal learning environments thus (a) include activities that are challenging and relevant and yet also allow students to feel confident and in control; (b) exact concentration but also provide enjoyment; (c) are intrinsically satisfying in the short term as well as build a foundation of skills and interest for the future; (d) involve both intellect and feeling; and (e) are both work-like and play-like—which is to say that they meaningfully engage (Shernoff, 2010b).

**EDUCATIONAL CONTEXTS PROMOTING ENGAGEMENT**

To summarize our research so far: There is not a great deal of flow or engagement in traditional U.S. public schools as a whole, but there are exceptions to this trend. Over the past decade, researchers have gained insights into ways to promote optimal learning environments in which experiencing flow and high engagement are the norm rather than the exception. We will now review recent research in several educational contexts that hold promise for understanding optimal learning environments: Montessori middle schools, organized after-school programs, and educational video games.

**Montessori Middle Schools**

Rathunde andCsikszentmihalyi (2005a, 2005b) conducted a large-scale study measuring the quality of experience of students (n = 280) from several Montessori middle schools and that of a comparison group of demographically matched public middle school students from the Sloan Study of Youth and Social Development (SSYSID; see Csikszentmihalyi & Schneider, 2000). Because we have already described engagement in the traditional public schools from the SSYSID study, we will focus here on describing the Montessori middle schools.

To set up optimal environments for student engagement through challenge and emotional support, the Montessori philosophy emphasizes the creation of a "prepared
environment" that integrates both freedom and high demands in order to increase the likelihood of spontaneous concentration in learning activities (Rathunde & Csikszentmihalyi, 2005a). The researchers found that Montessori students reported higher combinations of high intrinsic motivation and importance, indicative of meaningful engagement, compared to public school students (Rathunde & Csikszentmihalyi, 2005a). In contrast, public school students reported greater salience and importance, but low intrinsic motivation, a combination suggestive of a performance-goals orientation.

In a more recent ESM study, Rathunde (2013) assessed whether the Montessori practice of 30-minute morning nature walks would have a positive effect on students' attention and concentration during subsequent academic work when in class. Short-term effects of the walk were captured by a questionnaire completed immediately after the walks; and the ESM captured the lingering effects of the walk when students were later in class (approximately 1,500 signals across 4 days). The study found that students who felt fascinated while taking the walks were less distractible and mentally fatigued immediately after the nature walks; and the same students showed improved concentration lasting approximately 4 hours into the school day after the walk.

Organized After-School Programs

In contrast to formal classrooms, extracurricular activities that include academically enriching activities, athletics, and the arts are associated with heightened levels of challenge, enjoyment, intrinsic motivation, initiative, and academic performance among adolescents (Mahoney, Larson, & Eccles, 2005). Few studies, however, have explicitly examined whether engagement and related experiential factors in after-school programs help account for these outcomes. A recent study, therefore, examined if middle school students' engagement experiences and perceptions in after-school programs mediate the relationship between after-school program participation and socioemotional and academic outcomes (Shernoff, 2010a). Specifically, the research tested whether engagement and flow during after-school programs helped mediate the role of the development of social competence (i.e., student reports of goal setting and planning, conflict resolution, nonconformity, teamwork, and perspective taking) and achievement (i.e., math and English grades) over 1 year of middle school students' participation in school-based after-school programs.

Results showed that engagement and flow during program experiences accounted for a significant portion of the positive association between program participation and social competence. In addition, students who were more engaged in an after-school program, feeling that their after-school experiences were more challenging and important to them compared to their experiences in other out-of-school settings, went on to earn higher end-of-year grades in math and English. The amount of time students spent in these programs did not have a significant effect on students' engagement or on positive outcomes; thus, overall the results suggested that relative quality of experience in programs may be a stronger predictor of positive outcomes like academic performance than the quantity of experience in programs.

NEW DIRECTIONS IN STUDENT ENGAGEMENT RESEARCH

Computer and Video Games and Flow

Research on student engagement in educational video games has grown a great deal in the last two decades as their popularity has grown, and they have been used to increase one's desire to learn (Abrantes & Gouveia, 2012; Roberts, Focher, & Rideout, 2005; Scoresby & Shelton, 2007). Flow theory has been the theoretical base for exploring engagement through immersion or "being enveloped" by a virtual learning environment since the emotional composition of these experiences resembles flow. This sense of "presence," "being there," or "flow" while immersed in virtual-reality interfaces has been shown to facilitate efficient or deep learning of the content and skills that are integral to successful game play (e.g., Abrantes & Gouveia, 2012; Johnson, Vilhjálmsson, & Mascella, 2005; Liu, Chen & Huang, 2011; Precci, Singert, Levy, & Bowers, 2012; Van Eck, 2006).

Coller, Shernoff, and Strati (2011) examined the impact of applying a video game approach to teaching an undergraduate mechanical engineering course on engagement and learning. The video game developed by Coller, EduToys, is similar to commercial car racing games, except that student drivers write computer programs drawing on principles from mechanical engineering to race the car. The researchers found that students using the video game approach experienced significantly more engagement, intrinsic motivation, and positive affect—again as measured by the ESM—during their homework and labs, compared to a control group using traditional methods (i.e., solving problem sets from a textbook). A subsequent study showed that students using the video game approach made considerably greater learning gains as demonstrated by their course test performance, scoring almost one standard deviation higher on the tests than the control group (Shernoff & Coller, 2013). These learning gains were, in turn, linked to students' enhanced experience while doing their homework and labs with the game as measured by ESM items assessing if the learning activity seemed more like work, more like play, neither, or both. Reported levels of engagement, skill use, and the perception of the gaming experience as both "like play" and "like work" (indicative of flow experiences and meaningful engagement) predicted learning gains.

What About the Teacher's Role in Fostering Engagement?

An obvious influence on students' engagement and flow experience is the teacher. Although teaching and learning have traditionally been studied as separate processes (Kuster et al., 2008; Shuell, 1993), in reality, teachers and students co-create the pattern of classroom interactions together, which, in turn, impacts both teacher and student motivation (Turner & Warzon, 2009). According to Piasta, Hamre, and Allen (2012), the nature and quality of interactions between teachers and students are fundamental to understanding student engagement.

Shernoff and colleagues (2011) found that how teachers set up the learning environment—especially in creating an environment supporting positive relationships and student motivation—was just as salient in fostering student engagement as direct classroom-management skills. Specific instructional behaviors found to be associated with high engagement included interactivity, teacher's sense of humor, and use of
hands-on activities; those associated with low engagement included basing class activities on reading assignments (typically because some students may not have completed the reading) and allowing for homework completion during class time. However, further research is needed to determine the generalizability of these results.

Turner and Meyer (e.g., Turner & Meyer, 2004; Turner et al., 1998) provided a rich, contextualized picture of how skilled teachers go about achieving optimal levels of challenge and support to create high student engagement. For example, optimally engaging teachers might administer fewer problems to students, but they make these problems sufficiently challenging. Such teachers also provide support for students to solve them independently. They also ask questions for higher-order conceptual understanding, combined with providing feedback and emotionally supportive encouragement (i.e., conveying enthusiasm, demonstrating a sense of humor).

Şentürk (2011) investigated teachers' and students' perceptions about the existence of flow experiences in English courses in Turkey. Findings revealed that teachers could facilitate a flow experience for students by developing tasks that provide optimal challenge and support in areas of need. For example, setting up challenging tasks and supporting students who had poor vocabulary and grammar knowledge to express themselves effectively led directly to more flow experiences.

TEACHER'S FLOW

Although most engagement research has focused on student engagement, it is also critical to study teacher engagement. One obvious reason is to reduce teacher attrition. The attrition rate for U.S. public school teachers is estimated at 25% (Kaufman & Ring, 2011), with some estimates as high as 50% for new teachers with less than 5 years of service (Hughes, 2012). Teachers frequently cite job dissatisfaction as the primary reason for leaving (Hughes, 2012). Therefore, it is important to understand the conditions leading to teacher engagement. Another reason for its importance is that teachers who regularly experience flow are those who continually improve their skills to meet the needs of their students (Smith, 2009).

Under what conditions, then, do teachers experience flow? Basom and Frase (2004) reported that teachers frequently claim that their sense of flow was derived from students' engagement, just as students claim that their flow was caused by the teachers' engagement and enthusiasm. In one study, Smith (2009) demonstrated that teachers who applied differentiated instruction (a kind of instruction that requires close and individualized interaction between teacher and student) were more likely to experience higher levels of flow. In particular, when teachers assessed students' differences based on their interests and abilities and then accounted for these differences in their instructional approach, serving each individual student became like a puzzle to be solved, instilling flow and a spirit of artistry. Smith (2009) found that of nine domains of flow studied (i.e., challenge–skill balance, merging of actions and awareness, clear goals, unambiguous feedback, total concentration, sense of control, loss of self-consciousness, transformation of time, and automatic experience), all of them were positively correlated with differentiating instruction. Smith concluded that the more teachers take into account the students that they are teaching and how those students will best learn, the more engaged they become in their teaching.

When in flow, teachers reported feeling connected to their class; they maintained good eye contact and could sense the attentiveness of the class. One study of 178 music teachers and 605 students in 16 different music schools tested the hypothesis that flow experiences can "cross over" from teachers to their students (Bakker, 2005). The study found students' and teachers' flow were indeed positively related: The more flow the teachers experienced, the more the students experienced. When this occurs, the classroom dynamic may be experienced as "group flow" (Castodero, 2005; Shernoff & Csikszentmihalyi, 2009). Overall, student and teacher engagement appears to be highly interactive.

IMPLICATIONS FOR PROMOTING STUDENT ENGAGEMENT

Several implications for practice may be derived from our analysis of flow as it relates to student engagement and learning in schools. Flow is a useful model with which to conceptualize student engagement in classrooms. Although there has not been a great deal of engagement or flow found in U.S. public schools, factors such as student perceptions and goal orientation, instructional formats, the learning environment, and teacher behaviors all influence student engagement. Most available research tends to converge on the observation that optimal learning environments combine both environmental challenge and environmental support in order for learning to become both playful and challenging, both spontaneous and important (e.g., Rathunde & Csikszentmihalyi, 2005a; Shernoff, 2013; Turner & Meyer, 2004). Optimal learning environments can be achieved when teachers support students' autonomy and initiative, as well provide the opportunity for students to interact with peers and adults to obtain a sense of belongingness. In such environments, teachers provide activities that are challenging and relevant and also slow students to feel confident and in control—that those that exact concentration but also induce enjoyment. However, the opportunity for action and to build skills seem to be the key.

Some innovative school models are living examples that supporting students' natural desire to learn, especially through relationship support, is an important key to fostering optimal learning environments (in addition to Montessori schools, see Shernoff, 2012, for other empirically supported models). Organized after-school programs for students in traditional public schools can be extremely effective at both engaging students and cultivating their development (Mahoney et al., 2005; Shernoff, 2010a). Budding research suggests that new technologies that have the ability to "envelop" the learner in a virtual learning environment can be extremely flow-inducing and increase learning (Pearce, 2005; Spector & Shelton, 2007). Finally, teachers may experience more flow if they work to understand and account for individual students' interests, abilities, and skills. The teacher's flow can also be contagious, having the potential to cross over and stimulate students' flow (Bakker, 2005; Basom & Frase, 2004).

Using the flow model, researchers have discovered that creating engaged learners and optimal learning environments requires attention to a variety of contextual, instructional, developmental, and interpersonal factors beyond the preoccupation with educational outcomes narrowly defined. In addition, research is demonstrating that optimal learning environments must be intentionally designed to support these factors (Shernoff, 2011).
• Creating optimal learning environments requires attention to a variety of contextual, instructional, developmental, and interpersonal factors. Research is demonstrating that optimal learning environments must be intentionally designed to support these factors.

SUGGESTED READINGS: FLOW


This chapter provides a conceptual overview of flow as related to motivation and the development of competence, plus a summary of related research.


This valuable book describes the theoretical foundations, reliability and validity information, and practical applications of the Experience Sampling Method. It also provides logistical information for carrying out the method, from conceiving of a research question to analyzing the data; and it includes a chapter on ESM research in education.


This chapter overviews research on engagement and highlights influences on engagement as conceptually based in flow theory. Evidence-based, alternative models to improve engagement are highlighted, and implications for educational philosophy, practice, and policy are also discussed.


This book conceptualizes and analyzes optimal learning environments to promote student engagement from multiple perspectives, framing it as critical to learning and development. Drawing on positive psychology and flow studies, the book conceptualizes engagement as a learning experience, explaining how schools can maximize it among adolescents.


This volume intentionally selects and emphasizes a variety of optimally engaging learning environments for youth, not only to provide research evidence of their power to engage but also, more importantly, to describe in rich detail how these proven environments work in order to be of maximum usefulness to educators and policy makers.