

Discovering Emotion in Classroom Motivation Research

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This article discusses the serendipitous findings that illustrated the importance of students' and teachers' emotions during instructional interactions. Through revisiting former assumptions and findings, this article concludes that emotion is an essential part of studying motivation in classroom interactions. Emotions are intertwined in teachers' instructional responses and students' beliefs and actions, constituting an integral part of the interpersonal processes that create classroom contexts. This article calls for new theoretical syntheses and research programs that integrate emotion, motivation, and cognition as equal components in the social process of learning.

Research is both planned and serendipitous. In this article, we recount some serendipitous results of planned research studies on motivation in our 10 years of collaboration.¹ In looking back and tracing our assumptions and findings, we have come to realize how our current theoretical and methodological programs have developed. Through studying student–teacher interactions, our conceptualization of what constitutes motivation to learn increasingly has involved emotions as essential to learning and teaching. Thus, we discuss our initial conceptions of motivation and its relation to classroom contexts that have influenced our research. Then, we chronologically examine studies that serve as markers of our changing conceptions of motivation in classroom contexts. In each study, we describe the theoretical frameworks and methods, which resulted in findings that repeatedly emphasized the role of emotions. Finally, we discuss how these serendipitous findings pushed us beyond our original questions and pointed us in new and expanded directions.

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¹Our use of “we” is meant to be inclusive of our colleagues' contributions to the original research studies. We list them in the Acknowledgments section with appreciation.

EVOLUTION OF A RESEARCH PROGRAM ON CLASSROOM MOTIVATION: WHERE DID WE BEGIN?

In looking back on our research, we see how our theoretical and methodological assumptions obscured our ability to recognize the pivotal role of emotions in learning. Historically, psychologists have adopted three components to describe human learning: cognition, motivation, and emotion (e.g., “cognition, conation, and affection”; Snow, Corno, & Jackson, 1996, p. 243). Yet theorists and researchers have tended to study these processes separately, attempting to artificially untangle them rather than exploring their synergistic relations in the complexity of real-life activities. Current cognitive conceptions of motivation are focused on learners' thoughts and beliefs (cf. Pintrich & Schunk, 1996) and typically address only two components of human learning—cognition and motivation (Ford, 1992). Emotion has not earned an equal place on the motivation agenda and has not been a central feature of influential motivation theories such as goal theory, expectancy–value theory, or self-efficacy theory. As Ford (1992) summarized, “Although the relevance of emotional experience to motivation has long been recognized, the tendency has been to view emotions as a separate source of motivational energy rather than as an integrated part of motivational patterns” (p. 8).

Our original conceptions of motivation were certainly consistent with the dominant paradigm. For example, we began our research with a focus on cognition and motivation,

specifically on risk taking during challenging academic tasks. We viewed “motivation to learn” as evidenced by students’ perceptions and pursuits of learning goals that could be captured through their efforts to seek and engage in challenging academic tasks (cf. Brophy, 1983). We integrated concepts from several theoretical frameworks that appeared to address challenge seeking: (a) academic risk taking (Clifford, 1984, 1988, 1991); (b) goal theory (e. g., Ames, 1992; Dweck & Elliot, 1983; Nicholls, 1984); (c) students’ responses to failure (e.g., Covington, 1992); and (d) emergent motivation or “flow theory” (Csikszentmihalyi, 1990; Csikszentmihalyi & Nakamura, 1989). For example, we assumed that if an activity were optimally challenging, students would engage and pursue learning goals. We acknowledged the roles of emotion, volition, and social relationships, but placed them in the background, as if not immediately relevant to our research. In retrospect, this approach seems naïve. We failed to ask how students and teachers defined challenge and how they felt about its risks and benefits in relation to their goals. We also failed to consider the affective process during instructional interactions and how these experiences contributed to motivation to learn in a classroom. However, each research study was situated in real classrooms. Therefore, we gleaned answers to questions we originally had not planned to ask, and these answers always involved emotion.

Past Research: What Have We Learned?

Academic risk taking: Students’ responses to challenge. Our first research study was situated in an upper elementary mathematics classroom during several project-based activities (Meyer, Turner, & Spencer, 1997). The article based on this study focused on one math project, the “kite project,” and the cases of four students—two risk avoiders (Adam and Amy) and two risk seekers (Sara and Sam). We combined the theoretical concepts of academic risk taking, achievement goals, and self-efficacy to investigate two research questions: (a) How were students’ attitudes toward risk taking or challenge seeking related to their perceived goal orientations, self-efficacy, and strategy use? and (b) How were students’ self-reports related to the choices they made during the project and to their reactions to its outcomes?

Because we focused on students’ beliefs and perceptions as the sources of information about their motivation, they completed two surveys: (a) one that assessed academic risk taking and the extent of students’ response to failure—the School Failure Tolerance Scale (Clifford, 1988), and (b) one that assessed individual goals, self-efficacy, and strategy use—the Patterns of Adaptive Learning Survey (Midgley & Maehr, 1991). In addition, because we wanted to understand how these beliefs were related to students’ actions, we observed and videotaped classroom lessons, interviewed students before and after the project, and conducted an extensive interview with the teacher at the project’s conclusion. We

learned that challenge was a more complex construct when applied to classroom learning activities, concluding that “researchers need to give more attention to how metacognitive, motivational, volitional, and affective processes in the classroom simultaneously support students’ cognitive engagement and persistence in difficult work” (Meyer et al., 1997, p. 518). This conclusion was based on our unexpected finding that students’ emotions were integral for understanding their goals and self-efficacy as well as the different pathways they chose to make the project personally relevant and to maintain their well-being.

To our surprise, students had not dispassionately discussed their thoughts or goals; rather, their interviews were affect laden. Indeed, a reviewer for our article noted the pervasiveness of affect and asked us to address it more completely. The risk takers approached the project’s learning opportunities with positive feelings and in ways that met learning goals in collaboration with others. For example, Sara described how her mother and the teacher provided a support system for her hypothesis testing. Although she viewed her project-based approach as being “a good scientist” with pride, she reported being surprised and elated that others viewed her as a math expert. Similarly, Sam relied on collaboration with others (e.g., his father, sister, and Spencer, a friend from school). His approach was more exploratory, and he expressed feelings of loving to learn math and being so absorbed that he spent time out of class testing kite designs. He frequently discussed kites with Spencer at lunch, visited a kite shop to explore design possibilities, and described how challenges such as designing the kite were enjoyable (e.g., “because it was really fun and I like to have fun in school”).

In contrast, the risk avoiders noted more negative emotions, limited social supports, and very different goals and strategies for their projects. For example, although successful at designing a kite, Amy did not accept that she genuinely had accomplished the project but attributed her success to the excellence of the teacher. She expressed self-doubt and a lack of enjoyment in taking risks such as designing a kite, describing how she “played it safe” and followed the directions for a traditionally designed kite in a step-by-step fashion. Amy described how the teacher’s encouragement and help had sustained her, resulting in a feeling of gratitude for her success. In contrast, Adam projected mostly negative emotions and a “me-against-them” attitude. He described his unsuccessful attempts to outperform his peers, which was his goal after having performed well in the previous project. He talked to us about his anger, his strategy of procrastination, and even an abandoned plan for cheating on the project. Of the four students, he was the only student who felt unsuccessful and he attributed the kite’s failure to the weather conditions on the day of the final flight.

Thus, emotions were central to understanding the students’ goals, self-efficacy, and strategies, but they were not part of our original research questions. Serendipitously, student emotions were part of their responses to the negative-af-

fect-after-failure subscale on the School Failure Tolerance Scale and ever present in the interviews. We concluded that the risk-avoidant students had negotiated the autonomy afforded by the mathematics project in ways that helped them cope with negative feelings after failure (Clifford, 1988, 1991). For example, Adam reported negative affect and seemed to adopt emotion-focused coping, pretending it didn't really matter, to protect his emotional well-being (Boekaerts, 1993; 1998). Amy seemed to cope more positively, intertwining her lower sense of self-efficacy with the positive feelings related to teacher support. In this, our first study in which affect was an important finding, we viewed emotions more as an outcome of motivational processes, as discussed by both Weiner (1986) and Ames (1992). Later, we adopted a broader view of emotions as important to students' initial and ongoing participation.

In addition, this first research study pointed to two features of the classroom context that we wanted to examine further: (a) student-teacher relationships and (b) the opportunities afforded by classroom activities. Our classroom observations, which were not reported, had helped us understand how Amy's relationship with the teacher may have provided opportunities for help and approval that Adam did not have. Adam's infrequent contact and fewer positive interactions with the teacher might have contributed to his strategy of not asking for help. What became clearer in reflecting on these findings was how students' efforts to learn were connected to emotions, which were intertwined with their relationships with others. We also realized that the bottom-up, project-based activity afforded students various choices about how to approach or avoid classroom activities.

The influence of classroom context and self-regulation in literacy instruction. Our next study was in a fifth-grade literacy classroom where we focused on the students' attempts to self-regulate their involvement in various literacy activities (Turner, Parkes, Cox, & Meyer, 1995).² Our research questions were (a) How do students perceive and report their literacy activities? and (b) What characteristics of literacy make it challenging for students? The research questions reflected our assumption that features of the instructional activity could evoke motivation to learn. Involvement became our central construct, representing the experience of motivation to learn, which still encompassed students' goals, self-efficacy, and self-regulation in literacy activities. However, for this study we adopted Csikszentmihalyi's (Csikszentmihalyi & Csikszentmihalyi, 1988) concept of flow as a state that results from involvement in an activity chosen for its own sake and that promotes growth through challenges of existing abilities. We investigated how flow might be correlated with deeper levels of in-

volvement, higher personal efficacy, and more positive affect in classroom learning activities because those were the positive attributes we had found in the risk takers from our previous work.

As a multimethod approach we used classroom observations and interviews and adapted the experience sampling method (Csikszentmihalyi & Csikszentmihalyi, 1988; Csikszentmihalyi & Nakamura, 1989; Csikszentmihalyi, Rathunde, & Whalen, 1993) to capture a more immediate level of student experience. We used a modified version of the experience sampling form (ESF; Csikszentmihalyi) to ask students to rate (a) the degree of challenge and the depth of skills needed to complete the academic task and (b) their affect, potency, self-esteem, cognitive efficiency, degree of engagement, and intrinsic motivation in relation to the task. Flow theory proposes that combinations of challenge and skills (e.g., flow, boredom) will be correlated with affective reports. Students completed an experience log at the end of five literacy activities that we observed. The logs served as indicators of involvement during that activity. For the first time, our theoretical approach acknowledged a priori that affect and motivation were related.

With the ESF ratings, we identified the activities that were the most involving for particular students. Student interviews corroborated their ratings and illustrated how their emotions, such as enjoyment or boredom, changed with their level of involvement. For example, Tara described flow activities as ones in which she was "thinking a lot"; "feeling that I am understanding it and getting something out of it"; and "really into it ... I love writing stories ... Everyone kept saying, 'Tara, lunch time!'" In addition, literacy activities that allowed for more self-regulation resulted in students' adjusting challenges upward to change their negative feelings to more positive ones (e.g., from boredom to enjoyment). In her interview, Amanda commented that when a literacy activity was too easy she would "... like if it said to write one sentence, I would write a lot more and make it more interesting. I would make it harder for me."

We concluded that students' sense of autonomy was an important element of involvement in the literacy activities because it corresponded with opportunities to adjust their level of challenge, forming a better match with their skills and alleviating negative feelings or sustaining positive ones. Students were able to adjust their strategies to reach their goals because of the opportunities afforded by the instructional context. However, we were acutely aware that optimal learning experiences required a complex balance between contextual and individual factors. Therefore, in our next project, we took our own advice and continued to use the experience sampling method "because it measures momentary experiences and because it is closely tied to classroom events" (Turner et al., 1995, p. 135). Although we had focused on the individual student perspective in this study, we also recognized the limitations of not examining other "crucial components of the classroom context, such as dis-

²Although the literacy study (Turner, Parkes, Cox, & Meyer, 1995) followed the risk-taking study (Meyer, Turner, & Spencer, 1997) chronologically, the publication dates listed do not reflect this sequence.

course and student–teacher interaction” (Turner et al., 1995, p. 134), which had supported student involvement.

Contexts for involvement in mathematics: Teacher scaffolding of student involvement. Following these two initial single classroom studies, we wanted to examine more broadly how instructional contexts might influence student involvement. We now defined *involvement* as a psychological state that is concerned with the quality of experience (i.e., the perception that the challenges afforded by the instruction and students’ skills were both high and fairly balanced) during learning (Turner, Meyer, et al., 1998). However, rather than examining involvement from an individual perspective, our research questions focused on how conditions conducive to involvement could be created in whole class settings: (a) What is the quality of experience for students in a mathematics classroom? and (b) How is students’ quality of experience in mathematics related to characteristics of instruction found in teacher whole-class discourse patterns?

In this project, we combined student self-reported data sources with analyses of classroom interactions. As part of a multimethod approach, we used surveys, classroom observations, and experience sampling by adapting the ESF as a math log and discourse analysis of the instructional transcripts, which were coded for explicit instances of scaffolding motivation to learn (see Turner & Meyer, 1999). The use of discourse analysis involved adapting the conceptual framework of scaffolding (Wood, Bruner, & Ross, 1976) and the Vygotskian (1978) notion of zone of proximal development, which blended with our focus on instructional interactions that optimized challenge. However, in retrospect, we realize that we had repeated one of our initial errors—as we began to examine instructional discourse, we neglected to consider its emotional content. Although we were now including multiple sources of student self-reports about their emotions, our discourse analysis initially focused on cognitive and motivational processes (e.g., negotiating understanding, teacher control vs. student autonomy, and explicit messages about intrinsic or extrinsic reasons for learning). We were still navigating with the more cognitively based assumption that if instruction were supportive of cognitive processes, students would report more flow experiences and positive affect. We had not yet explicitly considered affect in the teacher discourse.

Nevertheless, once again, emotions were central to our findings, and they were significant features of both student self-reports and instructional interactions. We concluded that involvement was socially constructed “*motivationally* and *emotionally* by providing intrinsic supports, such as bolstering students in feeling confident, persevering, developing interest and curiosity, and appreciating mathematics as a tool and language” (Turner, Meyer, et al., 1998, p. 744). Surprisingly, we also found that students’ self-reported emotions were not always consistent with flow theory, which had guided our re-

search questions. Although the most positive emotional, motivational, and cognitive profiles were reported by students in challenging learning situations well matched to their skills (i.e., high-involvement classrooms), some students reported feeling happy in the classes that they rated as easy and boring. For example, we found that one teacher’s instructional approach appeared to contribute to an affectively positive but cognitively unstimulating context for very capable students (cf. Stipek et al.’s, 1998, “artificially sweet” affect).

These findings highlighted the importance of emotions for understanding student involvement in learning from the instructional perspective. The findings also revealed how classroom norms and roles, instructional activities and tasks, and the social structures of the classrooms were reflected in student feelings, beliefs, and actions. Moreover, the discourse analysis helped us interpret how the affective aspects of instructional interactions promoted student involvement in positive or negative ways. Instructional strategies shared among the high-involvement teachers were an emphasis on errors as a natural part of learning, the modeling of enthusiasm and interest in mathematics, and opportunities for student autonomy. However, as we noted, “the reciprocity among teacher and students in creating an involving learning context needs to be explored” (Turner, Meyer, et al., 1998, p. 744). Thus the concepts of reciprocity and context emerged as fundamental to a theoretical framework for future research (see the Future Directions section).

Role of emotion in achievement goals. A second article (Turner, Thorpe, & Meyer, 1998) evolved from data collected in the previous instructional context study (i.e., Turner, Meyer, et al., 1998). This article represented the first time that our research questions focused specifically on the role of emotions in motivation: (a) What are the motivational-affective patterns among students’ self-reported goals, deep strategy use, action after failure, preference for difficulty, self-efficacy, and negative affect after failure? and (b) Does self-reported negative affect after failure mediate self-reported ability goals and deep strategy use, preference for difficulty, action after failure, and self-efficacy?

In this study, we examined the relation between student affect and goal patterns. We found that negative affect was associated with lower learning goals relative to higher ability goals or in concert with low ability goals. We concluded that “affect has often been treated as an outcome variable in motivation (e.g., Weiner, 1985), but our research suggests that it may play a central role in explaining students’ responses to challenging work” (Turner, Thorpe, et al., 1998, p. 769). These findings helped us view emotions differently. We began to see them as important mediators of motivated actions to approach or avoid learning rather than merely as outcomes. This interpretation was based on Lazarus’s (1991b) theoretical conception of the role of emotions in appraising and coping with situations that are important to a person’s goals.

Instructional contexts that support students' negative affect and self-handicapping. As we moved to the next classroom research project, we expanded our coding of instructional scaffolding to capture more support (and nonsupport) of intrinsic reasons for learning, positive student–teacher relationships, and peer collaboration. This study, which was part of a multidistrict, 2-year longitudinal research program, focused on two sixth-grade classrooms in which students reported both high-mastery and high-performance goal structures (Turner, Meyer, Midgley, & Patrick, 2001).

Once again we implemented a multimethod approach through the use of surveys with classroom observation and discourse analysis. In addition, we extended our qualitative methods by observing and recording the entire first 2 days of school because during these first days teachers explicitly begin to communicate their views of what classroom norms should be. Our research questions changed to focus on the contexts in which students reported higher than expected negative affect or avoidance behavior: (a) Are student reports of approach and avoidance similar in two classrooms where students report a high-mastery, high-performance goal structure? and (b) Are characteristics of classroom discourse related to the approach and avoidance of self-reports? Thus, for the first time, we explicitly looked for classrooms in which some students were negatively coping and viewed the instructional context as being reflected in their perceptions.

We found that teacher support for student well-being was critical for understanding why students might experience negative affect and use avoidance strategies. Although student perceptions of high-mastery and high-performance classroom goal structures were similar in these two classrooms, perceptions of negative affect after failure and reported use of self-handicapping strategies were significantly different. We discovered that both teachers appeared to cognitively scaffold understanding and provide opportunities for student autonomy effectively. However, their patterns of affective support differed remarkably. In the classroom with higher student self-reports of negative affect and self-handicapping, the frequency of positive teacher responses was lower and the frequency of negative responses was higher. Thus, students in this classroom experienced some math lessons in which the teacher might have consistently admonished, “You know, I think they just loove to totally waste time and wait for somebody else to think of an answer,” whereas students in the other classroom consistently experienced positive affective support such as “Okay, okay, well, we’re gonna have some fun. Guess what we’re going to do? We’re gonna try to figure out some more angles again, measuring some more angles today.” Even when the students groaned in dismay, she continued positively, “I’m telling you guys you’re gonna have fun. Think F-U-N ... fun.”

Furthermore, patterns of affective support were even more evident in the teachers’ responses during the first days of school. For example, the students in the low affective support classroom were introduced to a system of privileged rank in

which positive behavior was rewarded with the title and privileges of nobles: “In my room, NOBLES [pause] may get out of their seat and sit wherever they want to. Because that’s a privilege. ...” However, in the high affective support classroom, the teacher took time to read through the class roster to make sure she knew the names of each student. While doing this, she made a personal comment to every student, such as “Okay I remember seeing you [last year]. She always had a beautiful smile. So nice.”

The evolution of our classroom research has helped us begin to integrate emotion and motivation simultaneously into our research framework, treating them as equal partners. We also have learned that highly involving classroom interactions, such as during well-scaffolded instruction, must include positive emotional support (Goldstein, 1999; Wood et al., 1976).

Current Research: Where Are We Now?

Across these classroom studies, we found patterns of interactions among students and teachers for building and supporting classroom contexts associated with positive affect, learning goals, and teacher support of student self-regulation of learning. Because our lens has come to rest on instructional interactions, our research has corroborated the general finding that teachers’ actions may serve as a “barometer” or indicator of classroom values, beliefs, and practices that help to regulate emotion, motivation, and cognition (e.g., Stipek et al., 1998; Urdan, Kneisel, & Mason, 1999; Vermunt & Verloop, 1999). However, just as the presence of positive or negative affect might be associated with student motivation to learn in the expected directions, the absence of affect may produce significant negative effects. For example, in our current work (Turner et al., 2002), we found a cognitively supportive instructional context associated with student reports of lower than average learning goals and higher than average avoidance behavior. In comparison to other classrooms in which similar cognitive support was provided, a defining feature of this classroom was the low incidence of any form of teacher affective support. Affective teacher responses were absent in both their common positive (e.g., encouragement, interpersonal interaction, jokes, or laughter) and negative (e.g., scolding, sarcasm, humiliation) forms. Thus, an instructional context with low affect as a feature of student–teacher interactions appeared to be similar in student perceptions to contexts characterized by more negative affect. This finding suggests that cognitive support is necessary but not sufficient for learning experiences to evoke student involvement.

These recent findings parallel the results of other researchers who have illustrated how teachers’ affective responses are important at both the academic or cognitive level and at the interpersonal level (e.g., Patrick, Anderman, Ryan, Edelin, & Midgley, 2001; Skinner & Belmont, 1993; Wentzel, 1997). Common instructional characteristics across these studies

were the teachers' enthusiasm, humor, and love of learning. Thus teachers' explicit responses and demonstrations of their personal positive emotions and motivation as learners are evident both as features of instructional context and as correlates of student reports of positive affect and motivation to learn.

This research underscores the reciprocity among participants in instructional contexts—how their beliefs, emotions, and actions are constructed through the social interactions to which they contribute. These considerations have been important for understanding the interrelations among emotion, motivation, and cognition in classroom learning and have led us to reconsider a dichotomy in our research program: the one between the individual and the context. As Brophy (1999) noted, motivation to learn traditionally has been viewed as a disposition (i.e., “an enduring tendency to value learning,” p. 12) and as a situation-specific state. We initially followed this tradition by investigating how the traits of a motivated learner (e.g., students' goals, views of challenging learning, etc.) were influenced by the instructional context (e.g., teachers' instructional strategies, characteristics of the task, etc.). However, we have learned that classroom interactions and individual perceptions are interdependent (i.e., when you study one, you get the other). As we go beyond the separation of emotion from motivation and cognition, we also need to go beyond trait versus state in our theories of motivation to explain human learning.

Future Directions: What Is Needed to Move Forward?

Comprehensive theoretical work that articulates how emotion, motivation, and cognition interact within classroom contexts is needed if understanding learning is to move forward. Although our research has borrowed from several theoretical frameworks that appeared to support our research questions, these frameworks provided only some of the pieces to the theoretical puzzle that we are trying to solve. With current theories, we have reaped some of their strengths (e.g., integration of emotion) and their constraints (e.g., emotion as an outcome variable). Now we seek theories that will help us research and better understand how emotion is intertwined with motivation and cognition within the context of classroom learning. In other words, we seek theories that explain how the social and individual processes of learning are woven together.

To accomplish these goals, we need theories that do not “background” one process for another. Although the separation of emotion, motivation, and cognition frequently is noted, theories appear to emphasize one process over the others. For example, Ford (1992) defined emotions as inherent in motivation (i.e., as “an integrated part of motivational patterns,” p. 8). In contrast, Lazarus (1991a) explained how the “solution [to the relation between cognition and emotion] is to recognize that emotion is a superordinate concept that in-

cludes cognition ... ” (p. 353) and that emotions are inherently motivational because “we don't become emotional about unimportant things” (Lazarus, 1991c, p. 819). What we need are theories that synthesize these relations comprehensively because we find emotion, motivation, and cognition inseparable in classroom contexts.

Simultaneously, we need theories that do not present the individual and the context as discrete. Many motivation theories have evolved from individual difference perspectives and assume that motivation resides in the person. Thus, the individual–context dichotomy is commonly conceptualized as the “person-in-context.” Although this theoretical assumption seems to imply reciprocity, it does so as reciprocal causation because the process of motivation is viewed as both trait and state. The person and the environment are seen as “fits” to each other. This was, indeed, our original position, but now we need theoretical frameworks that will take us beyond how students react to their classroom contexts and how contextual features influence students' perceptions. Our research findings suggest that the person and the context, such as cognition, motivation, and emotion, each could be viewed as contributing to the development of the other. Thus they interact as one system, not as two.

Theoretical and research possibilities. Theories of human development such as Bronfenbrenner's (1979) ecological theory and Vygotsky's (1978) sociohistorical theory suggest that just as cognitions are constructed as part of social interactions, so too can motivations and emotions. This is not to propose that there are no individual cognitions, motivations, and emotions. Rather, these theories emphasize that what an individual perceives is an integral part of the immediate context as well as of those contexts that encompass it (e.g., Bronfenbrenner's “nested environments”) or of the sociocultural histories that are a part of current interactions and ways of understanding (e.g., Vygotsky, 1978). Such contextualized theories view the environment and the person in terms of entwined reciprocal relations for understanding human development and learning. However, these theories do not categorically articulate the relations among emotion, motivation, and cognition for classroom learning. Over the last decade, the beginnings of theoretical and empirical work have begun to emerge that address these needs. Researchers interested in educational applications have highlighted how emotion is intertwined with cognition and motivation (Boekaerts, 1993, 1995; Pekrun, 1992; Schutz & Davis, 2000; Skinner, 1995). Integration of social context has become an important goal for educational psychologists (e.g., Anderman & Anderman, 2000; Urdan, 1999). In addition, theoretical frameworks have been articulated that emphasize a mutual reciprocity between the learner and the environment (McCaslin & Hickey, 2001a, 2001b; Yowell & Smylie, 1999). However, moving forward often requires looking back to reexamine our historical roots and assumptions.

The field of educational psychology needs syntheses of current theories with articulation within theories to explain the interrelations among emotional, motivational, and cognitive processes among people. These new conceptual frameworks may challenge former assumptions and findings, as we found in our research. Yet at the same time, new frameworks suggest new ways of exploring the complex, interpersonal relationships in classrooms, which will make future research findings more readily applicable to teachers and students. It is hoped that such potential strides will help avoid repeating a history of omitting relations for a single process or of ignoring social interactions to focus on either individuals or environments, as we did in discovering that emotions are essential for understanding classroom learning contexts.

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