

The Emotions of Professional Learning: Considerations for Instructional Leaders

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Abstract

Although instructional leaders increasingly acknowledge the influence of emotion on student learning, the role of emotion in teachers' professional learning has received less attention. In this conceptual article, we draw on three psychological perspectives—cognitive, organizational, and developmental—to provide instructional leaders with an overview of the role of emotion in professional learning. Given the emotional complexities of teachers' work, we explain how the affective aspects of learning are particularly salient during teachers' professional learning opportunities. We provide instructional leaders with recommendations to optimize both the design and implementation of professional learning based on understandings of teachers' emotions.

Keywords

professional learning, teacher development, emotion, instructional leaders

School leaders increasingly recognize the role of emotion in students' academic outcomes (Atwell & Bridgeland, 2019; Wrabel et al., 2018). In response, they are taking on many of their instructional leadership responsibilities in ways that account for the role of student emotion in learning (Kennedy, 2019). For example, instructional leaders are investing in socioemotional curriculum as they select curricular materials (Krachman & Larocca, 2017). They are allocating minutes for social emotional

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learning during advisory blocks and morning meetings as they design instructional schedules (Hamedani & Darling-Hammond, 2015; Rimm-Kaufman & Chiu, 2007). Leaders are starting to utilize social and emotional screeners as an important source of data as they create school-wide multitiered instructional support systems (Dineen et al., 2021). These actions suggest that instructional leaders are approaching their professional responsibilities with recognition of affective dimensions of teaching and learning (DePaoli et al., 2017).

Yet school leaders may be overlooking the role of emotions in learning within another important aspect of instructional leadership: the role of emotions in *teachers'* professional learning. Building teachers' professional capacity through professional learning is a crucial aspect of instructional leadership (Hitt & Tucker, 2016). Garner and Kaplan (2019) define professional learning as "changes in knowledge, orientation, and skills that pertain to the person's conception of teaching and actions as a teacher" (p. 2). Instructional leaders spend significant time and resources designing and implementing professional learning opportunities for teachers. The goal of this work is to foster ongoing alignment between the needs of the students within the school and the teachers' competencies to meet those needs (Spillane & Coldren, 2015).

Researchers have identified elements of professional learning opportunities that lead to improved instructional practices and student outcomes. According to existing research, professional learning that facilitates collaboration, allocates time for educators to receive feedback and engage in reflection, includes active learning opportunities, and models effective instruction is most effective in improving teacher practice and student outcomes (Darling-Hammond et al., 2017; Desimone, 2009; Desimone & Garet, 2015). To maximize investments in professional learning, professional learning opportunities should also be sustained in duration, content focused, coherent with school goals, and supported by school leadership (Darling-Hammond et al., 2017; Desimone, 2009; Desimone & Garet, 2015).

Just as students' emotions shape their motivation and engagement in learning (Linnenbrink-Garcia & Pekrun, 2011), emotions shape the experiences of adult learners (Dirkx, 2008), including teachers (Uitto et al., 2015). However, in existing research regarding effective professional learning, there is a lack of discussion or guidance regarding the role of teachers' emotional experiences during professional learning. In addition, research suggests that instructional leaders typically receive little training on teachers' psychological and emotional experiences (DePaoli et al., 2017; Patti et al., 2015).

At the same time, a growing body of research demonstrates the centrality and salience of emotions in teachers' work (Frenzel et al., 2021; Stark & Bettini, 2021). Such research demonstrates that teachers' emotions have important implications for both staff and students, as teachers' day to day work is very emotionally demanding (Jones & Youngs, 2012; Taxer & Gross, 2018; Yin et al., 2019). An emerging research base also suggests that teacher's emotional experiences inform how they experience professional learning (e.g., Kwakman, 2003; Saunders, 2012; Shanks et al., 2012; Thomson & Turner, 2019). Therefore, in this paper, we draw on three psychological perspectives—cognitive, organizational, and developmental—to provide school

leaders with understandings of how emotions may influence teacher learning. We situate this research within the complex emotional landscape of teachers’ work and pay particular attention to teachers’ professional learning experiences. Drawing on these perspectives, we provide instructional leaders with recommendations to optimize both the *design* and *implementation* of professional learning based on understandings

	PL Design	PL Implementation
Cognitive Psychology	<ul style="list-style-type: none"> → Consider a “less is more” approach to the amount of content presented → Provide graphic organizers or learning templates → Consider scaffolding instruction using the “I do-we do-you do” sequence 	<ul style="list-style-type: none"> → Provide teachers with a transition time before the PL starts → Consider beginning PL with a mindfulness video to help teachers transition to the PL activity → Encourage movement or bio breaks (e.g., getting water, standing up)
Organizational Psychology	<ul style="list-style-type: none"> → Include social opportunities (e.g., “turn and talk”) → Provide opportunities for internal reflection or small group practice before more public practice → Include opportunities for teachers to ask questions or provide feedback privately 	<ul style="list-style-type: none"> → Activate a positive emotional climate (e.g., opportunities for sharing shoutouts or moments of gratitude) → Set group intentions, including honoring varied experience and expertise → Provide advance affirmation for those who ask questions or express confusion → Consider various group arrangements, including strategic placement of educators known to strongly support or oppose the PL initiative
Developmental Psychology	<ul style="list-style-type: none"> → Align PL with teachers’ learning priorities → Provide opportunities for teachers to share PL needs anonymously → Incorporate meaningful teacher choice → Include applications to teachers’ classrooms 	<ul style="list-style-type: none"> → Acknowledge the inherent vulnerability in considering new teaching practices → Be transparent and vulnerable about your own learning → Recognize how emotional vulnerability may vary across teachers and activities; provide accommodations as necessary (e.g., open invitation to teachers to step away from the content as needed)

Figure 1. Recommendations for designing & implementing emotionally informed professional learning.

of teachers' emotions (summarized in Figure 1). We conclude with a discussion of implications for future research and practice.

Three Psychological Perspectives on the Role of Emotions in Teacher Learning

Cognitive Perspectives

Perhaps the most direct evidence regarding the impact of emotions on teachers' professional learning comes from cognitive psychologists. Although the role of emotion in cognition has a long and contested history, scholars now recognize emotion and cognition as deeply intertwined (LeBlanc et al., 2015; Pessoa, 2008). Information processing perspectives articulate that emotions influence all stages of the learning process, inform the type of information learners attend to, and influence how learners experience and store information in memory (Dolcos et al., 2011; Yiend, 2010). Learners' ability to recall even neutral information differs depending on the emotional context in which it was received (Erk et al., 2003). Learners' abilities to encode and recall information are diminished when they are under stress (Schwabe & Wolf, 2010; Vogel & Schwabe, 2016). Thus, teachers' high work-related stress levels (Cancio et al., 2018; Steiner & Woo, 2021) may impact their experiences during professional learning activities. On the other hand, when learners have positive emotions towards learning activities or content, these emotions may help them to focus their attention on the learning task (Tamir & Robinson, 2007), or broaden their thinking regarding the learning content (Fredrickson, 2000). For example, Thomson and Turner (2019) found that teachers who had more positive emotions at the beginning of a professional learning session made more changes in their teaching practices afterwards.

Cognitive load theory (Sweller, 2011) provides insight on the role of emotions in learning. Because learning occurs when information is transferred into memory, the amount and type of information a learner is expected to process during a learning activity (e.g., the *cognitive load*), impacts how much is actually learned (Sweller, 2011). Information not directly related to the learning task creates an *extraneous* cognitive load that reduces cognitive resources available for achieving intended learning outcomes (Hawthorne et al., 2019). When a learner is experiencing intense emotions during a learning activity, the cognitive effort required to process those emotions can detract from their ability to attend to and process the intended learning content (Plass & Kalyuga, 2019).

Teachers experience a wide range of emotional valences and intensities at school each day (Jones & Youngs, 2012). Professional learning typically takes place immediately after school or during planning periods of the school day. Therefore, teachers will likely be simultaneously processing school-related emotions (i.e., an extraneous cognitive load) while also processing the content of the professional learning. In addition, because teachers vary in both their feelings of efficacy and emotional appraisals of different professional activities (Jones et al., 2022), engaging in specific types of

professional learning may trigger different emotions for various teachers. For example, many elementary school teachers experience some form of anxiety related to teaching math (Beilock et al., 2010). Teachers may even experience anxiety or other negative emotions regarding domains within a content area: in a study of preservice teachers, Brigido et al. (2013) showed how elementary science candidates had more negative emotions regarding future physics lessons as compared to future biology lessons. Teachers' emotions regarding a particular content area or professional activity may add to cognitive load, shaping their reception and attentiveness to professional learning content.

Cognitive Considerations for Design. Instructional leaders might want to consider a “less is more” approach to the amount of information provided within any specific learning session (Bannert, 2002) because the complex emotional demands of teaching (Tuxford & Bradley, 2015) may impact teachers' cognitive processing during professional learning opportunities. Instructional leaders might consider reducing cognitive load by offering graphic organizers (Stull & Mayer, 2007) or learning templates (Martin, 2016). They can also use the familiar “I-do, we-do, you-do” sequence to scaffold demands (Archer & Hughes, 2010). For emotionally demanding content, they may also consider reducing cognitive load through scaffolded instructional strategies, including explicit instruction, opportunities to practice with feedback, and guided independent application (Martin & Evans, 2018). One suggestion is structuring professional learning to include the familiar “I do-we do-you do” sequence often used with students to support teacher learning.

Cognitive Considerations for Implementation. Not all instructional leaders have the time, resources, or agency to actively design professional learning opportunities. At times, instructional leaders are mandated to provide pre-packaged trainings required by the state or district. However, instructional leaders can still take cognitive perspectives on teacher emotion into account when implementing professional learning. First, instructional leaders can protect a few minutes of transition time before the learning session starts to help teachers focus their attention on the learning task and reduce their attention on external stimuli, particularly emotional stimuli. School leaders could spend 2–5 minutes playing a brief mindfulness video before beginning a learning session, as engaging in mindfulness has been demonstrated to be an effective way to reduce teacher stress and thereby improve teacher learning (Taylor et al., 2021). In addition, school leaders could consider explicitly encouraging teachers to take voluntary movement and bio breaks (e.g., getting water, standing up) during a learning session to reduce distractions, stress, or anxiety impinging on cognitive processing during professional learning.

Perspectives from Organizational Psychology

Organizational psychologists offer a second set of important insights regarding the role of emotions in teachers' professional learning. Research in organizational psychology

recognizes how professional emotions are not only an intra-personal response to workplace events, but rather, they are socially “contagious” and therefore transfer among colleagues (Ashkanasy, 2003; Hökkä et al., 2020). Because people tend to mirror the emotions of those with whom they interact (Hatfield et al., 1993), when teachers engage in professional learning opportunities, they are often influenced by their peers’ emotional responses to learning activities. If some teachers express enthusiasm during a professional learning session, this is likely to spread during the session, whereas teachers’ outward displays of boredom or resentment are also likely to influence their peers. Burnout (Meredith et al., 2020) and joy (Mawhinney, 2008) also easily spread among school staff. Given the cognitive effects of emotions on learning described in the previous section, maintaining a positive culture and climate is particularly important during group professional learning activities. Effective instructional leaders develop a culture that promotes collective responsibility (Le Fevre et al., 2020), trust (Tschannen-Moran, 2014), inclusion (DeMatthews, 2015), and collective efficacy (Goddard et al., 2015). Positive culture can foster interpersonal connectedness that can help teachers to navigate the wide range of emotions they experience during learning and implementation of professional learning (Saunders, 2012). In addition, teachers who have strong relationships with colleagues are more likely to learn informally from each other’s practice (Meirink et al., 2009). For example, in a study of new teachers in Scotland, Shanks and colleagues (2012) found that new teachers were able to build trusting relationships with colleagues by connecting with other teachers emotionally about aspects of their social and personal lives. These relationships subsequently supported critical discussions about instructional practices.

Although the interpersonal aspects of emotions can support teacher learning, organizational psychologists also point to the potentially harmful role of emotional labor in professional organizations (Grandey & Gabriel, 2015). Employees within many professions face the need to engage in emotional labor, or the regulation of external emotional displays for professional purposes (Hochschild, 1983). For example, teachers often regulate the display of their emotions during interactions with colleagues to demonstrate professional competency (Stark & Bettini, 2021). Because professional learning occurs within the social “micropolitics” of the school building (Jokikokko et al., 2017), social structures and spoken and unspoken emotional norms might influence how teachers express themselves during professional learning opportunities. Therefore, teachers might engage in emotional labor to avoid expressing emotions and may hesitate to ask a question, show confusion, or display disagreement or frustration during a professional learning session (e.g., with a new initiative) depending on their perception of the social dynamics of their school. In a study of novice teachers in Norway, Jakhelln (2011) documented how new teachers engaged in emotional labor to hide professional insecurities from their colleagues. This is a concern because when teachers do not feel comfortable asking questions or seeking clarification, professional learning opportunities may not lead to classroom-level changes. It is important for instructional leaders to consider the ways emotions associated with the social structures of the school organization shape how teachers participate in learning opportunities.

Organizational Considerations for Design. Given the social dimensions of emotion and learning, it is important for instructional leaders to include social opportunities within the design of professional learning. Instructional leaders could consider building in turn-and-talks to initiate teacher conversations and support collegial relationships. They might also invite teachers to present work they are proud of or teaching dilemmas for which they would like peer support and feedback. Participation opportunities, however, should be designed to enable teachers to participate without reaching an unsustainable level of vulnerability. Opportunities to practice with trusted peers or reflect internally should proceed more public practice opportunities. In addition, professional learning sessions should be designed to allow teachers to privately ask questions or provide feedback. This way, opportunities are not missed due to the emotional consequences of displaying confusion or frustration in front of peers.

Organizational Considerations for Implementation. An organizational perspective suggests that because emotions transfer among staff, it is likely beneficial to activate a positive emotional climate at the beginning of learning activities. Um et al. (2012) found that inducing positive emotions before a learning activity (through repeating a series of positive mantras out loud) increased adult learners' reported mental effort while completing a task. Instructional leaders might ask staff to share positive shout-outs about their colleagues or moments of gratitude or humor from their classrooms. Given teachers' tendency to engage in emotional labor to appear competent in front of their peers, setting group intentions at the beginning of professional learning sessions can also be valuable. Such intentions should highlight how different members bring varied types of expertise to a learning session (Esteban-Guitart & Moll, 2014), thereby challenging micropolitics honoring only certain types of professional knowledge or expertise. Spoken intentions might also acknowledge how shared confusion and misconceptions can easily go unspoken and affirm that teachers' requests for clarification are appreciated by the administrator. It can be helpful to highlight that these requests for clarification will likely enhance both an individual teacher's and others' understanding. Administrators might also take responsibility for teacher confusion occurring during the professional learning activity, stating that their lack of clarity likely underlies teachers' confusion. Together, these verbal statements and group intentions may reduce some of the vulnerability teachers feel in expressing confusion or seeking clarification during professional learning activities.

Instructional leaders might consider various group arrangements to social activities (e.g., turn and talks or group work) embedded within professional learning experiences. Instructional leaders might create groups of teachers that vary in role and level of experience to facilitate shared learning and build relationships and trust among various staff members. In addition, instructional leaders may strategically place teachers who have expressed excitement towards an initiative ("champions") in specific groups to capitalize on the potential for this enthusiasm to spread to others. Conversely, instructional leaders might think carefully about the group placement of teachers who they know are resentful or frustrated about specific professional learning initiatives.

Developmental Perspectives

Lastly, developmental perspectives offer a third and final set of insights regarding the role of emotion in teachers' professional learning. Knowles (1998) and other scholars in the field of andragogy (i.e., the study of adult learning) explain that because adults' stage of development and maturity is distinct from that of children, their learning opportunities should be designed differently than those of children. Specifically, as compared to children, adult learners tend to have vaster experience to draw on, more intrinsic motivation, a greater desire for the learning to be immediately relevant and practical, and higher expectations for agency within their learning (Knowles, 1998). Recognizing teachers' unique learning needs and expectations (i.e., as compared to those of children) will likely help school leaders to develop and implement effective professional learning opportunities. For example, Kwakman (2003) found that the extent to which teachers found activities meaningful predicted their frequency of engagement. In addition, a developmental perspective on learning recognizes how evolution in one's own professional identity can be an emotionally vulnerable process (Kelchtermans, 2013). In contrast to some professions, teaching is inherently personal because teachers' emotions and personality are considered professional tools (Taxer & Gross, 2018). Day and Leitch (2001) explain, "The professional self in teaching reflects and is reflected by personal history, past and present, as well as the political and social contexts of teaching" (p. 414). When teachers engage in learning opportunities, they undergo *contextual identity change*, not only absorbing new skills or knowledge, but fundamentally challenging previous concepts of their professional identities (Garner & Kaplan, 2019). Schutz and Lee (2014) explain, "Teacher identities and emotion are not linear or unidirectional; rather, they are inextricably related to each other through an ongoing, multidirectional, transactional process."

Because the line between personal and professional is sometimes thin (Lasky, 2005), when teachers engage in professional learning, they are likely to negotiate their beliefs, identity, and practices (Saunders, 2012). Teachers may take learning personally and feel vulnerable when they are asked to consider different ways of teaching (Kelchtermans, 2013; Mendoza et al., 2021). Kelchtermans (2016) ties the concept of adult learners' need for agency and the vulnerability of professional learning together, explaining:

The criterion for 'improvement' implies taking a normative stance on what is good... teachers have clear views about this and as such the imposition of a normative view from policy makers may cause serious conflicts with how they see good education... this conflict may be very emotional, especially when implementing the innovation demands giving up deeply held beliefs on teaching and being a good teacher. Giving those ideas up unsettles, hurts, and possibly demotivates if the experience also involves powerlessness vis-à-vis the policy making (p. 39).

Learning opportunities associated with various initiatives and reforms within an organization may therefore result in different emotional responses from various members of the organization, depending on how much the reform challenges their

pre-existing notions of their professional identity or their conceptions of what works best in classrooms (Antonacopoulou & Gabriel, 2001).

Developmental Considerations for Design. As instructional leaders design professional learning opportunities, it is important to recognize that the process of change can be emotionally vulnerable for teachers. Given insights from developmental perspectives, professional learning opportunities should be designed to align with the learning priorities of teachers. Teachers should be provided with formal and informal opportunities to share the pedagogical challenges with which they would like to receive support. In addition, given insights from organizational psychology about teachers' emotional labor, anonymous opportunities to provide feedback about desired professional learning might also be provided to see if common themes (e.g., student engagement) emerge across staff members. Next, professional learning opportunities should be designed to incorporate as much teacher choice as possible. When possible, this could involve choice of the learning opportunity itself, but can also include options within a session, such as the choice of whether to watch a video or read a text or analyze one's own data or de-identified data. Providing teachers with choices may build their agency, buy-in, and positive emotions towards learning activities. As teachers value relevant and practical learning, opportunities should also be designed with applications to teachers' classrooms and opportunities for teachers to share how the content connects with their own experiences.

Considering the inter- and intrapersonal vulnerability of teacher learning, instructional leaders should consider the extent to which the tasks they require teachers to participate in increase teachers' emotional vulnerability. Mendoza et al. (2021) note the emotional vulnerability of narrating one's own learning history publicly; given this vulnerability, instructional leaders are encouraged to think carefully about the level of vulnerability required in different learning tasks and how this may vary across learners. Here, incorporating choice and intentional grouping can help to reduce the emotional vulnerability teachers experience.

Developmental Considerations for Implementation. Building trust is an important aspect of instructional leadership. At the beginning of a learning session, instructional leaders can acknowledge the inherent emotional vulnerability of learning. To build trust and empathy, as appropriate, instructional leaders can provide transparent examples of their own professional vulnerability in learning new pedagogical practices, unlearning implicit biases, or engaging in educational reform. Effective leadership begins with a leader's own self-knowledge and deep commitment to their own "why" for engaging in the work (Hattie & Smith, 2020; Robertson & Earl, 2014).

Instructional leaders should acknowledge also how teachers' personal and professional identities interact to inform the extent to which specific professional learning activities feel emotionally demanding. Teachers of marginalized identities might have disproportionate emotional demands placed on them during professional learning opportunities about diversity, equity, and inclusion. Special educators and general

educators may experience different emotional demands during professional learning opportunities on disability. Professional learning on trauma may be particularly demanding for some teachers, who have their own past or present experiences of trauma or are experiencing secondary traumatic stress (Caringi et al., 2015). Instructional leaders should encourage teachers to engage in the professional learning opportunity, but step away from the content related to trauma as needed (Koslouski & Chafouleas, 2022).

Although instructional leaders might consider avoiding professional learning topics associated with more intense emotional experiences (e.g., inequity, bias, or trauma), we strongly encourage instructional leaders to engage with these topics with teachers in their schools, and to do so with careful attention to teachers' emotions. Addressing challenging topics in an emotionally informed way is crucial to supporting teachers' development. For example, teachers increasingly request training in trauma (e.g., Hobbs et al., 2019; National Council of State Education Associations, 2019), and it has been shown to improve teachers' use of trauma-informed practices (e.g., Dorado et al., 2016; Koslouski, 2022). Teachers' secondary traumatic stress can worsen if unaddressed, whereas professional learning on this topic can reduce secondary traumatic stress symptoms in teachers (Caringi et al., 2015).

Summary and Implications

Although school leaders have some guidance to draw on regarding student emotions (e.g., Skaar et al., 2022), they have very little guidance regarding teacher emotions. Much of the literature on school leadership addresses the importance of building positive interpersonal relationships; doing so requires the emotional competencies necessary to build both trust (e.g., Bryk & Schneider, 2003; Tschannen-Moran, 2014) and a sense of collective efficacy (e.g., Goddard et al., 2015; Leithwood et al., 2020) with and between teachers. Effective instructional leaders develop a clear vision for their schools and engage staff in both shaping and enacting that vision (Demerath, 2018; Hattie & Smith, 2020).

However, to our knowledge, there are few resources providing leaders with direct strategies for addressing the role of emotions in teachers' professional learning. In this conceptual paper, we provided school leaders with an overview of the insights offered by three psychological perspectives related to the role of emotions in teacher learning and associated strategies to use. By considering the role of teacher emotions in the design and implementation of professional learning, instructional leaders' investments in professional learning opportunities are more likely to pay off.

The continued effects of COVID-19 on teaching and learning have highlighted the important role of teachers' emotions in schools (Stark & Koslouski, 2022). Both students and teachers have experienced the grief of losing loved ones, the anxiety of health and financial concerns, and the overall instability of frequent shifts in schedules and routines. Therefore, it is ever more important for teachers to provide high-quality, responsive learning opportunities for their students. Yet, as teachers are being asked to quickly shift, evolve, and develop their practices to meet the shifting educational

landscape (Green & Bettini, 2020), teachers' own emotional experiences and potential trauma also need to be considered by instructional leaders. If not, we risk increasing teachers' emotional exhaustion and reinforcing trends in teacher burnout and attrition that negatively impact the quality of the teacher workforce.

As the effects of COVID-19 continue to unfold, we also encourage researchers to engage in scholarly work bridging research from various psychological and educational perspectives to understand the role of emotion in teacher learning and development (Carew & Magsamen, 2010; Goswami, 2006). With increases in virtual learning, the role of emotion in multi-media learning, and the use of technology to regulate learner emotions, are areas rife for future research (Graesser, 2020; Plass et al., 2014). Despite the challenges of the pandemic, we encourage researchers and school leaders to use this historical moment to take stock of what is already known about teachers' emotions and consider innovative ways to design and implement future professional learning opportunities with teachers' emotions in mind.

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