

Sensemaking and School Failure: Lessons from Two Cases

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Abstract

The analytic power of sensemaking has been widely applied throughout the organizational literature. Yet, while Weick's (1993) seminal article on the collapse of sensemaking in organizations has been widely cited in the educational literature, it has rarely been applied to the problem of school failure in the face of organizational change. This case study analysis advances a preliminary framework for sensemaking in schools based on both Weick's insights and newer developments in the sensemaking literature. It then explores the cases of two schools that failed in the face of change through this framework. I conclude by comparing the cases to Weick's recommendation for group structure and resilience, and draw implications for school and district leaders to prevent school collapse in the face of planned change.

Key words: organizational theory, sensemaking, case study

Background

In Karl Weick's (1993) influential article exploring the Mann Gulch disaster, the author professes to be interested in answering two questions: First, why do organizations unravel? Second, what can be done to make organizations more resilient? Weick takes as the object of his analysis the Mann Gulch fire, during which 13 of 16 smokejumpers

deployed to fight the forest fire perished as the flames advanced. Weick suggests that the outfit of smokejumpers qualify as a minimal organization because they act according to habituated patterns of action and have interchangeable roles (pp. 622-623). These sorts of minimal organizations are susceptible, Weick argues, to sudden losses of meaning or "cosmology episodes... the opposite of

déjà vu: I've never been here before, I have no idea where I am, and I have no idea who can help me (p. 623)"

Weick employs the analytic framework of sensemaking to explain the tragedy. Specifically, Weick argues that the group's prior assumptions were reinforced, fatally, by actions of other group members. Suddenly, when it became clear that these assumptions are wrong, and that the fire is much more serious than originally believed, group members lose capacity for collective action (p. 635). Worse, Weick suggests, the groups' sense of role structure disintegrates contemporaneously with their ability to make sense of their situation (p. 636).

Weick suggests four particular tactics designed to hedge against a collapse of sensemaking. The first, bricolage, involves normalizing unpredictability so that improvisation becomes a routine part of one's job. When sensemaking and structure collapse, then, "a substitute [organizational order] might be invented immediately" via improvisation (p. 640). Second, Weick highlights the need for virtual role systems: the ability of any member of an organization to run the organization in their head, and therefore, to step into any vacated role. Third is an attitude of wisdom which is characterized by an overabundance of neither caution nor certitude. Such an attitude allows people to appropriately discount past experience while also appropriately applying lessons from past experience (p. 642). Finally, Weick suggests that respectful dyadic interaction based in trust is an important resource in crisis (p. 643).

Weick concludes his article by deconstructing his original question, "what the

structure of a small outfit should be when its business is to meet sudden danger and prevent disaster" (p. 644). Weick draws four conclusions. First, the smallness of the group is less important than the minimal communication that occurs between members of the group.

Second, structure matters less than structuring. Weick describes structuring as an interaction between shared meanings and the role frameworks that reinforce those meanings (p. 645). At Mann Gulch, argues Weick, the collapse of meaning amplified the collapse of frameworks, which further amplified the collapse of meanings (p. 645). Weick suggests that a generic framework for preventing a complete collapse of both meaning and structure is to ensure that a loss of meaning reinforces structure and that a loss of structure reinforces meaning. That is, "when social ties deteriorate, people try harder to make their own individual sense of what is happening, both socially and in the world. These operations increase meaning, and they increase the tendency to reshape structure consistent with heightened meaning. Alienation intensifies attentiveness to meaning, which reduces alienation" (p. 646). Or, in the opposite case, "when meaning becomes problematic and decreases, this is a signal for people to pay more attention to their formal and informal social ties and to reaffirm and/or reconstruct them. These actions produce more structure, which then increases meaning... Puzzlement intensifies attentiveness to the social, which reduces puzzlement" (p. 646).

Weick's third observation is that "outfit," to the extent that it connotes close cooperation, is a misnomer. The smokejumpers acted in an environment where "simply acting in concert was enough, and

there was no need to know each other well in addition” (p. 647). This lack of close ties may have prevented the group from controlling their emotions in the face of panic. Finally, Weick suggests, structure per se may matter less than the forms of communication emphasized by the group leader, and the extent to which this communication promotes “trust, honesty, and self-respect. But... also... inquiry, advocacy, and assertion” (p. 650).

The Mann Gulch smokejumpers provide a simple and parsimonious case for Weick to explore sensemaking in organizations, and the collapse of sensemaking (along with structure) leading to organizational failure. The challenge is to apply sensemaking more broadly to more formal and complex organizations than an outfit of smokejumpers to understand the ways that sensemaking impacts organizational functioning.

For the past two decades, educational researchers have found sensemaking to be a powerful theoretical tool for exploring organizational functioning, and one with strong implications for the leadership of organizations (Coburn, 2005; Evans, 2007). In particular, sensemaking is employed as an analytic approach when scholars hope to explain how complex and often abstract inputs become concrete outputs or outcomes (Coburn, 2001).

Although sensemaking has been employed to explain individual and collective response to crisis and acute change in a variety of settings, sensemaking studies in education have tended to focus more on moderate change situations; for example, the way teachers implement a new standardized testing regime (Louis, Febey, & Schroeder,

2005). This is perhaps unsurprising, given that schools are often characterized by long-term permanence and short-term change (Bidwell, 2001). However, as Weick’s (1993) analysis suggests, the lessons offered by employing a sensemaking lens appear most clearly when the actors involved are forced to make a series of important decisions with limited information in relatively quick succession.

The purpose of this analysis is to apply a sensemaking lens to the problem of school failure. I begin by exploring the growth in the sensemaking literature over the past two decades with a particular focus on the strengths and shortcomings of the educational literature on sensemaking. I suggest a provisional framework for sensemaking in acute change situations supplemented by scholarly works on sensemaking outside education. Then, I present two cases of schools that substantially disintegrated following significant organizational change. Finally, I suggest some preliminary lessons based on this analysis for how policymakers and school leaders can make schools (and school staff members) more resilient from collapse in the face of organizational change.

The Origins of Sensemaking

In this section, I offer a largely descriptive accounting of Weick’s work on sensemaking beyond his seminal Mann Gulch article. I’ll offer a fuller accounting of a framework for sensemaking and school failure below, but, throughout this paper, the definition of sensemaking I’ll advance draws heavily from Weick’s work.

Although Weick’s analysis of the Mann Gulch disaster is arguably his most famous, his interest in the social psychology of making sense dates back as far as 1969 (Weick, 1969). In 1988, Weick applied a sensemak-

ing lens to crisis situations for the first time in his analysis of the Bhopal disaster (Weick, 1988; Weick, 2010; Maitlis & Sonenshein, 2010). Following Weick's (1993) analysis of the Mann Gulch disaster through the lens of sensemaking, Weick (1995) wrote a much broader and more comprehensive work, *Sensemaking in Organizations*. Weick details seven characteristics of sensemaking: grounded in identity construction, retrospective, enactive of sensible environment, social, ongoing, focused on and by clues, and driven by plausibility rather than accuracy (Weick, 1995, p. 17). Importantly, Weick distinguishes sensemaking from interpretation by arguing that sensemaking precedes interpretation: "[w]hen people discuss interpretation, it is usually assumed that an interpretation is necessary and that the object to be interpreted is evident. No such assumptions are implied by sensemaking" (Weick, 1995, p. 14).

Weick concludes *Sensemaking in Organizations* with a call for significantly more empirical research into sensemaking phenomena (Weick, 1995, p. 174). A decade later, Weick returned to the concept of sensemaking to "take stock" of contemporary research in the field (Weick, Sutcliffe, & Obstfeld, 2005, p. 409). In this work, Weick and his co-authors offer a concise definition of sensemaking: "Sensemaking involves turning circumstances into a situation that is comprehended explicitly in words and that serves as a springboard into action" (Weick et al., 2005, p. 409).

Weick et al. (2005) argue that sensemaking is a useful concept in organization theory. They organize their analysis into understanding sensemaking descriptively (the

properties of sensemaking, similar to those in Weick's 1995 book), conceptually in terms of the relationship between sensemaking and organization theory, and prospectively in terms of fruitful direction for future research.

The authors' descriptive analysis of sensemaking highlights the origins of sensemaking in an ambiguous disruption that proscribes business as usual. Actors bracket and group observations together, connect these observations with their knowledge of the past and assumptions about the future, and engage in dialogue with other actors. Sensemaking results in an articulation of meaning that proceeds into action, and meaning and action continue to unfold iteratively (Weick et al., 2005, p. 413).

At first glance, this definition of sensemaking appears to conflict with one of Weick's earlier tenets of sensemaking: that sensemaking is retrospective, i.e., this view of sensemaking means "that reality is an ongoing accomplishment that emerges from efforts to create order and make retrospective sense of what occurs" (Weick, 1993, p. 635). However, as Weick et al. (2005) make clear, they mean something very particular by the term retrospective. The authors offer the example of a nurse who notes a patient's worsening condition based on the differences with the patient's condition two hours prior. The nurse is acting upon the present based on a discrepancy in his/her perceptions of past and present conditions: the patient's condition is not worse, it becomes worse by comparison (Weick et al., 2005, p. 412).

The authors also describe sensemaking conceptually. They argue that sensemaking is a process that leads to intra-organizational evolution based on the selected meanings attached to environmental

circumstances by organizational actors (Weick et al., 2005, p. 414). The authors also locate sensemaking in the organizational literature in three other ways. First, sensemaking occurs when there is a difference between the expected and perceived state of the world. Second, sensemaking is not about a search for “truth,” but rather about a search for a plausible frame that explains events satisfactorily. Finally, the authors argue that sensemaking is closely tied to organizational identity construction. The way that organizational actors make sense of novel situations are reacted to by people outside the organizations, and the outside image of organizations has the power to stabilize or destabilize organizations’ internal identities (Weick et al., 2005, p. 416).

Sensemaking in Education

The education literature on sensemaking has tended to focus on moderate change situations. While several of Weick’s most widely cited works in sensemaking focused on intense crisis situations (Weick, 1988; Weick, 1993), scholars of education have most often used a sensemaking lens to explore how school leaders and teachers respond to new policy initiatives. Indeed, the fairly limited way that sensemaking has been applied also bears in important ways on limitations in sensemaking’s explanatory power in education. The following literature review is intended to be representative rather than exhaustive, with the aim of highlighting differences in how Weick and scholars of education theorize sensemaking, as well as how they apply the concept. Throughout this section, in order to best highlight differences among scholars of education and Weick, and differences in conceptualization *among* scholars of education, I

consider a number of perspectives in turn.

Spillane, Reiser and Reimer (2002b) explore how actors in educational organizations make sense of new policies. The authors note sensemaking “is not a simple decoding of the policy message; in general, the process of comprehension is an active process of interpretation that draws on the individual’s rich knowledge base of understandings, beliefs, and attitudes” (Spillane et al., 2002b, p. 391). Compared with Weick, these scholars adopt a very cognitive and individual conceptualization of sensemaking. They do not explore sensemaking as a primarily social activity. Rather, they argue that sensemaking may occur amongst a group of individuals, but that these individuals are making their own sense, rather than co-constructing an understanding. Specifically, Spillane et al. (2002b) break sensemaking down into three constituent parts. The first, individual cognition, relates to an individual’s prior knowledge, experiences, and beliefs (Spillane et al., 2002b; Stern, 2016). The second, situated cognition, relates to social identities, social networks, and workplace structures as they are understood by particular *individuals* (Spillane et al., 2002b; Stern, 2016). Finally, Spillane and his colleagues note that a policy’s representation via rationale, language, and consistency shape sensemaking (Spillane et al., 2002b; Stern, 2016, p. 454).

To the extent that sensemaking is social in Spillane and his colleagues’ understanding, it is situated in the “practices and common beliefs of a community” (Spillane, Reiser, & Gomez, 2006, p. 58). Like Weick, Spillane and his colleagues view sensemaking as ongoing, and add that it is particularly shaped in education by the artifacts and materials involved (Spillane et al., 2006, p. 62).

Spillane also attends more closely than Weick to institutional context in sensemaking. For Spillane, understanding the ways that institutions constrain sensemaking, and the way that human agents work within those bounds is central to understanding life in schools (Spillane et al., 2006, Spillane et al., 2002a). One aspect of this is that actors in different situations within organizations can differently interpret the same messages (Spillane et al., 2002b, p. 397). This is a valuable addition to sensemaking frameworks because it acknowledges non-social (or meta-social) factors that govern sense-making.

Coburn (2001, 2005) adopts something of a middle ground between Weick and Spillane. Whereas Spillane centers the cognitive aspects of sensemaking, Coburn focuses especially on how teachers' networks or contacts shape their reactions to policy stimuli (Coburn, 2001, p. 147). Like Weick, both Spillane and Coburn attend to the ongoing nature of sensemaking. However, one key distinction is that in much of the sensemaking literature outside education, ongoing sensemaking is related to additional changes in the external environment (Maitlis & Christianson, 2014). In education, ongoing sensemaking tends to be related to developing rich and thorough interpretations of a single initiative (Coburn, 2001; Spillane et al., 2002a), often interpretations that emanate from important actors in the school's or district's environment.

Unsurprisingly, studies of sensemaking in education pay particularly close attention to the relationship between principals and teachers (Coburn, 2005; Spillane et al., 2002a). As the building-level staff member charged with implementing new policy, the

ways that principals' interpretations of policy meanings influence teacher interpretations is particularly important in education research. The sensemaking literature as a whole places emphasis on role structure (Maitlis & Christianson, 2014; Weick, 1993), but Coburn (2005) observes that the ways principals influence building culture has significant implications for how teachers communicate about new policies. Evans (2007) adopts a similar perspective in understanding how school leaders make sense of racial and demographic change (see also Spillane et al., 2002a).

Louis, Mayrowetz, Murphy, and Smiley (2013) consider a very social conceptualization of sensemaking when considering how teachers make sense of calls for distributed leadership. The authors examine the case of a high school that implemented distributed leadership practices amongst its staff, and found that by creating organizational space to examine and analyze the changes taking place, many members of the school staff became sensegivers: "people in the setting who understand the change goals, the school's culture and history, and who are capable of communicating scenarios of consistency to others" (Louis et al., 2013, p. 43), who provided additional momentum for the change. The authors' understanding of sensemaking is inherently social -- school staff collaborated to make meanings out of the policy changes thrust upon them. Louis et al. (2013) offer a helpful heuristic for understanding the outcome of sensemaking (p. 40). The key operating conditions are: (1) the degree of the difference between policy and current conditions, (2) frequency of processing with peers, (3) availability of time for deep processing, and (4) the nature of formal and informal

“sensegivers” (p. 41-44). In an earlier work, Louis and her colleagues likewise emphasize that a social conception of sensemaking is powerful because individual cognition may entrench one in the status quo if change appears too daunting. The opportunity to spread work, collectivize action, and learn collaboratively offers a means for social sensemaking to improve the likelihood of substantive change (Louis et al., 2005, pp. 179-180).

Within the education literature on sensemaking, then, there are a variety of perspectives. Spillane’s conceptualization, the most widely cited, centers on the cognitive process of sensemaking (Spillane et al., 2006; Spillane et al., 2002). Spillane does not ignore social sensemaking, but co-constructed sensemaking is not nearly as important as it is for Coburn (2001, 2005) or for Louis and her colleagues (Louis et al., 2013). In certain ways, the applications of sensemaking in education build on Weick’s conceptualization in valuable ways. For example, Spillane and his colleagues pay close attention to the ways that institutional context constrains sensemaking (Spillane et al., 2006). Although Weick (1993, 1995) notes the importance of role structure for sensemaking, educational scholars applying a sensemaking lens use the rich literature on relationships between teachers and school leaders to undergird their analysis (Coburn, 2005; Evans, 2007; Louis et al., 2013).

In other ways though, the sensemaking literature in education is underdeveloped relative to the variety of applications it has found in the management literature since Weick’s articulations. Most importantly, sensemaking in education has been applied

to moderately sized gradual change initiatives to understand diverse outcomes in policy implementation (Honig & Hatch, 2004). Moreover, perhaps because sensemaking unfolds over relatively long periods in the education literature, educational scholars largely ignore the temporality of sensemaking, whether it is prospective or retrospective. Finally, although Weick did not explicitly identify the importance of emotions in sensemaking in his early work (with the notable exception of his focus on the role fear played in Mann Gulch), later works by Weick and other organizational scholars have highlighted the ways that emotion matters in sensemaking. Thus, although this literature review has intentionally accentuated differences between how Weick and scholars of education conceptualize sensemaking, there is considerable room for both richer sensemaking frameworks in education and in the ways that sensemaking is applied.

New Directions in Sensemaking

Although sensemaking is a useful lens for understanding certain situations in education, it has generally been more widely applied in the management literature (Evans, 2007). In 2014, Maitlis and Christianson performed a thorough review of the empirical literature to examine how events become triggers for sensemaking, how intersubjective meaning is created, and what role exists for action in sensemaking. The authors also explore what sensemaking accomplishes (Maitlis & Christianson, 2014, p. 89).

The authors conclude by examining remaining gaps in the sensemaking literature. First, they highlight ontological differences in existing conceptions of sensemaking. Some scholars locate sensemaking as a pri-

marily individual cognitive activity -- people make sense of the world in their own minds. This approach is grounded in the social cognition literature (Maitlis & Christianson, p. 94). Other scholars (including Weick) argue that sensemaking is a fundamentally social activity, and that meanings are constructed socially, not cognitively. Scholars writing from these perspectives are usually grounded in symbolic interactionism, or, more lately, in discursive organizational analysis (Maitlis & Christianson, p. 95). Second, Maitlis and Christianson (2014) point out that some scholars talk about sensemaking as a retrospective activity, where actors take stock of what has occurred, and other scholars think about sensemaking prospectively. The authors ultimately dismiss these two dilemmas arguing that these competing positions are unlikely to be resolved *per se*, and suggest instead that authors should be explicit about their assumptions when they write about sensemaking.

One additional area that has received a great deal of focus in recent works on sensemaking is the role of emotion in sensemaking. Maitlis and Sonenshein (2010) find that emotion may play a particularly important part in sensemaking during crisis situations. In general, emotion has been viewed as an impediment to rational cognitive processing (Maitlis & Sonenshein, 2010, p. 566). In crisis situations, intense negative emotions can derail sensemaking, but can also provide an acute signal that change is necessary. To the extent that these emotions are *expressed* as well as *felt*, these emotions provide a powerful signal and may be especially “contagious” shapers of social sensemaking (Maitlis & Sonenshein, 2010, p.

568). Self-conscious emotions (such as shame and guilt) are also important because they may cause one to act in ways that promote a particular image of one’s self even if that action exacerbates the crisis (e.g., not retreating in the face of an enormous fire for fear of being seen as weak). (Maitlis & Sonenshein, 2010, p. 569). Intensity appears to be a significant predictive of whether emotion will contribute positively or negatively to the outcome of sensemaking -- very intense emotions are likely to lead to maladaptive outcomes while moderate emotions are likely to provide valuable insight (Maitlis & Sonenshein, 2010, p. 570). In many ways, this reflects Weick’s observation that an attitude of wisdom is a source of resiliency for organizations (Weick, 1993).

Maitlis, Vogus, and Lawrence (2013) expand this analysis of sensemaking to a framework whereby particular valence emotions (positive or negative) tend to produce different types of sensemaking. They argue that positive emotions are more likely to produce sensemaking that is “generative... a process in which relationships among cues and frames are constructed flexibly and creatively to allow the development of novel accounts” (p. 230). Negative emotions produce sensemaking that is “integrative... accounts [that] are continuously and critically evaluated with respect to their plausibility” (p. 230). Similarly, emotions that are primarily “global” produce social sensemaking, whereas emotions that are primarily self-conscious produce sensemaking that is individual (pp. 231-232). Importantly, these relationships are merely heuristics, not deterministic.

Sensemaking is an oft-employed frame for understanding organizational crisis, failure, and collapse. However, a few observations from the extant literature on organizational failure outside of sensemaking will prove useful to understanding school failure. Traditionally, frameworks based in industrial organization and organization ecology have viewed the external environment as the deterministic factor in whether organizations thrive or fail (Mellahi & Wilkinson, 2004, p. 21). On the other hand, frameworks based in organization studies and organizational psychology have viewed the actions and (mis)understandings of managers as the primary cause of organizational failure (Mellahi & Wilkinson, 2004, p. 21). In important ways, a sensemaking approach both critiques and integrates these broad perspectives. For example, a sensemaking frame allows one to analyze actions in the context of industrial or organization ecological change/crisis (Maitlis & Christianson, 2014). Sensemaking frameworks provide an agentic understanding of how people act and react when faced with unfavorable external circumstances. Similarly, although the sensemaking literature highlights the important role of leaders (and principals in education in particular) as sensegivers, it also provides a richer and thorough explanation for how the actions of actors throughout an organization influence outcomes.

A few observations from the literature on organizational failure do bear on the present analysis. First, the quantity of disruptions appears to play an important role (Rudolph & Repenning, 2002). For a time, effective organizations are able to operate at a higher efficiency because of disruptions,

but eventually disruptions tend to destabilize organizations in a way that amplifies negative effects (Rudolph & Repenning, 2002, p. 1). Second, organizational resilience, defined as “the magnitude of disturbance the system can tolerate and still persist” (Limnios, Mazzarol, Ghadouani, & Schillizzi, 2014, p. 104) can be a liability in certain situations. If organizations are not resilient when they exist in a desirable environment, they become dependent on the environment: they are vulnerable (Limnios et al., 2014, p. 109). On the other hand, if organizations are highly resilient but exist in an undesirable environment, they are likely to be overly rigid in their reactions (Limnios et al., 2014, p. 109). Finally, examining the case of Enron, Tourish and Vatcha find that the totality of the vision at Enron led to a stifling of dissent and a prioritization of conformity (Tourish & Vatcha, 2005, p. 455). The frames/worldviews available to employees at Enron were not sufficient to apprehend the crisis and avert collapse.

A Provisional Framework for Sensemaking and School Failure

Sensemaking is clearly a multifaceted process. There is no wide consensus on certain aspects of sensemaking theory, such as the extent to which it is social vs. individual, or whether temporality of sensemaking is primarily retrospective or prospective. In some cases, scholars clearly have different interpretations of what sensemaking is and how it works. In other cases, scholars appear simply to have applied an interpretation of sensemaking that suits their context (e.g., policy interpretation and implementation in schools).

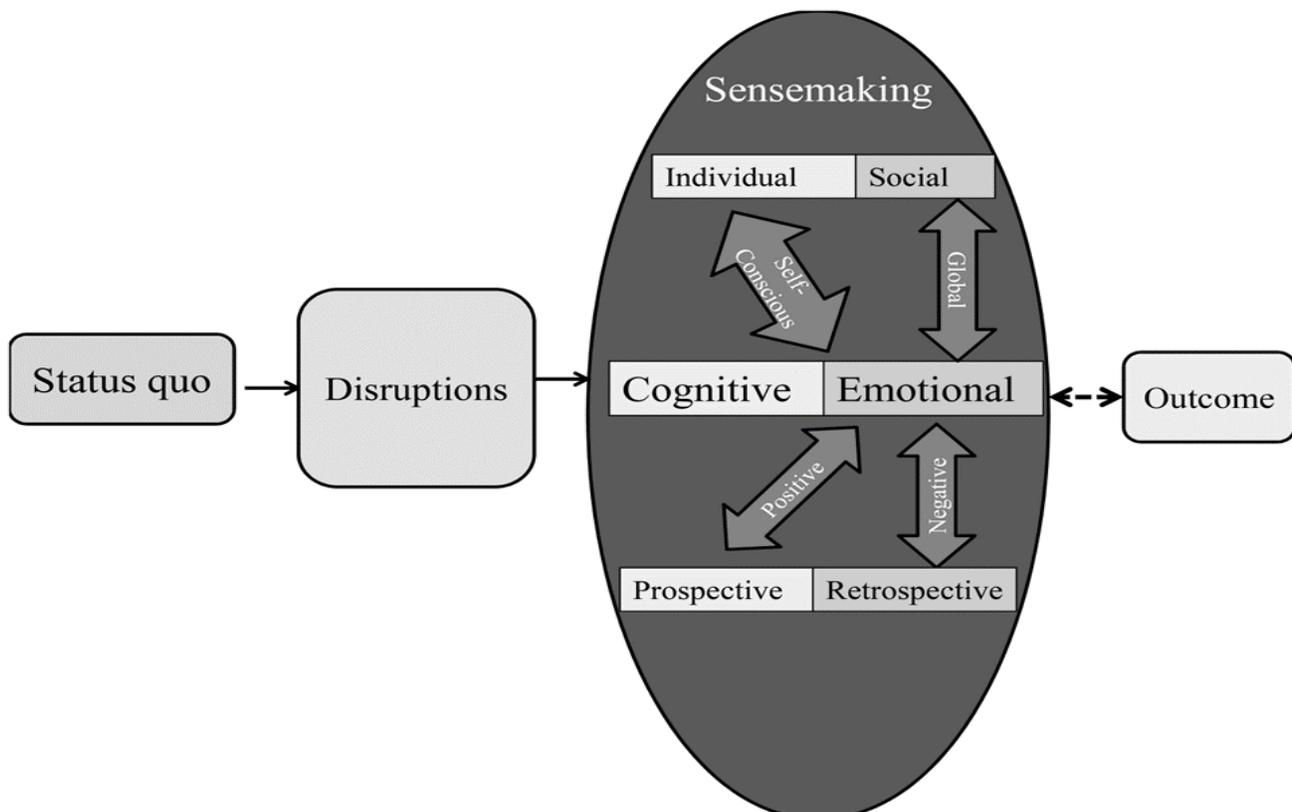
In this section, I offer a provisional framework for how sensemaking occurs in schools.

I believe that this framework moderately improves on previous applications of sensemaking in education in several ways. First, it offers a way to explain how change situations in schools become crisis situations. Past analyses of sensemaking in education have focused on policy interpretation and implementation (Coburn, 2001; Coburn, 2005; Evans, 2007; Spillane et al., 2002; Stern, 2016). The degree of change varies, but never seems to trigger something resembling a cosmology episode (Weick, 1993). Second, it incorporates more robustly the role of emotion in sensemaking, a key component in helping to explain why challenges sometimes spin out of control. Indeed, in reprising his own 1988 work on the Bhopal crisis, Weick (2010) observed that a major deficiency was that he portrayed sensemaking as a cold, rational process, whereas in

fact emotions of panic played a major role (See Figure 1).

Sensemaking begins with a disruption to the status quo. In education, this disruption is most often a change in policy or school practice, but outside of education the disruption may be a variety of planned change or crisis situations (Maitlis & Christianson, 2014). Importantly, the status quo is an individually and socially constructed state. Weick (1995) is perfectly correct that all sensemaking is retrospective in the sense that it evaluates a disruption with respect to one's understanding of the state of affairs prior to the disruption. The literature on organizational failure indicates that certain aspects of the disruption's context are important. First, if the disruption has the characteristic of leading to many individual interruptions, it may

Figure 1: A New Framework for Sensemaking



trigger a negative cascade. Second, disruptions occur with particular levels of organizational resiliency and freedom of dissent/expression operating in the background. These contextual characteristics shape the sensemaking process as well (Spillane et al., 2002), but at the moment of disruption they qualitatively change the nature of the disruption.

Provided the disruption to the status quo is sufficiently large, it triggers a sensemaking episode, i.e., a need to rethink or “make sense of” a new reality. The framework above is stylized in that there is complex interplay between the individual and social aspects of sensemaking, as well as cognitive and emotional sensemaking. Because these different aspects of sensemaking proceed contemporaneously, it is difficult to fully model the ways they interact. Rather, I have sought to identify some important distinctions between each aspect of sensemaking.

Social vs. Individual Sensemaking

To a certain extent, all sensemaking is both social and individual. Individual sensemaking tends to be focused more on tasks: the ways in which individuals will need to act to meet a new challenge. Individual sensemaking is likely to be most impactful when individuals have time to deeply process new stimuli (Louis et al., 2013). Social sensemaking, on the other hand, is likely to be high-leverage when there is a great deal of peer contact (Louis et al., 2013). Social sensemaking is also governed in part by power relations: understandings of authority and legitimacy will govern whose sense gets made (Louis et al., 2013). Social sensemaking is likely to be grounded in and con-

strained by institutional and organizational concerns (Spillane et al., 2002). Finally, the impact of individual sensemaking is likely to be limited, whereas social sensemaking may tend to amplify the scope of actions taken in response to a stimulus simply because responses can be coordinated and collectivized (Louis, Febey, & Schroeder, 2005).

Cognitive vs Emotional Sensemaking

Much of sensemaking is cognitive (Spillane et al., 2002). Indeed, for educational scholars utilizing a sensemaking framework, the preponderance of sensemaking appears to be a cognitive activity (Coburn, 2001; Spillane et al., 2002). There is agreement in the management literature as well that cognition matters a great deal: any way one views it, using one’s mind to apprehend a change or crisis situations is a key component of sensemaking (Maitlis & Christianson, 2014). However, until recently the role of emotion in sensemaking has been underappreciated, particularly in the education literature on sensemaking (Maitlis et al., 2013). One key distinction between cognitive and emotional sensemaking appears to be in the way each frame is applied to understanding disruptions. Cognitively, disruptions are understood in terms of their size. Emotionally, disruptions can best be understood in terms of the extent to which they threaten or alter one’s individual or organizational identity. For the purpose of this analysis, I also adopt Maitlis et al.’s (2013) framework about emotion in sensemaking, articulated above.

Prospective vs Retrospective Sensemaking

Weick argued that sensemaking is a retrospective activity: we act upon our understanding of the present based on our understanding of the past. Actors “extract cues and make plausible sense retrospectively, while

enacting more or less order into... ongoing circumstances" (Weick, Sutcliffe, & Obstfeld, 2005, p. 409). In a limited sense, this is certainly the case. No sensemaking can occur without an understanding of what has happened before. Weick cites Paget who points out, "A mistake follows an act. It identifies the character of an act in its aftermath. It names it. An act, however, is not mistaken; it becomes mistaken" (as cited in Weick et al., 2005, p. 412). What is happening in the present can only be understood based on what has happened in the past. However, I suggest that a better way to characterize this might be to say that sensemaking is *referential*. All sensemaking is retrospective to some extent, but it may be prospective in important ways as well (Maitlis & Christianson, 2014).

Sensemaking that is primarily retrospective is likely to be more deeply grounded in the context offered by the past. It is therefore likely to be comparatively conservative and integrative with an eye to limiting digressions from a previous state (Maitlis et al., 2013). With respect to what Weick (1993) called an attitude of wisdom, highly retrospective sensemaking is likely to suffer from over caution. On the other hand, sensemaking that is more prospective is likely to be aspirational and creative and relatively less restricted from divergence with the past. With respect to an attitude of wisdom, highly prospective sensemaking is likely to suffer from overconfidence (Weick, 1993).

Putting it All Together

The different elements of sensemaking (social/individual, cognitive/emotional, and prospective/retrospective) do not exist in isolation with one another. Indeed, as described

above, Maitlis et al.(2013) suggest that the type of emotions experienced by those making sense bears on whether the sensemaking is primarily social or individual as well as whether it is prospective or retrospective. Less has been written about the way cognitive sensemaking is linked (or not linked) to the social or individual and prospective or retrospective aspects of sensemaking. It appears that for cognitive sensemaking the extant circumstances or preexisting habits of action may do more to govern whether sensemaking processes are social/individual or prospective/retrospective than cognition itself.

The purpose of the binary pairs described above is not to suggest that any sensemaking is entirely on one side or the other of any of the pairs. Rather, it is to underscore that sensemaking is a complex phenomenon, and particularly, to highlight that emotion appears to play a critical and heretofore underappreciated role in the shape of sensemaking.

Sources of Data and Methods

The data for this study is drawn from information gathered from a larger four school cross-case study on student engagement at small schools with a particular curricular focus (in this case, creative arts and expeditionary learning). The original study was conceived as a case study because the natural bounds of the study are a set of schools (Stake, 1995; Yin, 2013). As Merriam (1998) notes, "case study offers a means of investigating complex social units consisting of multiple variables of potential importance in understanding the phenomenon" (p. 32).

The primary sources of data for the original study were 32 semi-structured interviews of teachers, as well as approximately

320 total hours of participant observation both within classrooms and in staff meetings over the course of an entire school year (Merriam & Tisdell, 2015). Frequently, observation of a classroom or staff meeting would be followed by one or a few informal (unrecorded) conversations to contextualize events and seek more information. One admitted weakness of the present study is that it is largely constructed from field notes. Because the simmering organizational conflicts between adults often had only tangential bearing on the main topic of the study, these conflicts often played only a small role in the formal semi-structured interviews of school staff which focused instead on how teachers leveraged the school's specialty to improve student engagement. Instead, discussions about conflict tended to occur in field notes based on informal interviews before or after staff meetings, although some teachers did broach the subject (unprompted) in their semi-structured interviews. In both cases much of the conflict occurred after formal interviews were nearly completed. Consequently, there are few direct quotes in the case studies because I would generally paraphrase in my notes on informal conversations or meetings.

Despite the thinness of the data record, I did take several steps to increase the credibility, consistency, and transferability of the results of this study (Lincoln & Guba, 1985). First, I performed member checks of teachers to ensure that my accounting of events and the way participants reacted to events matched their memories. Second, I kept a detailed log on the provenance of my data. Finally, I will attempt to thoroughly contextualize my findings and conclusions so that readers can appropriately decide whether

the findings apply to their context (Merriam & Tisdell, 2015, p. 267). Moreover, as Corbin and Strauss (2008) argue, "[t]he reason why observation is so important is that it is not unusual for persons to say they are doing one thing but in reality they are doing something else" (p. 29). In recounting the cases, I will identify places where people's professed interpretation of events appears at odds with their actions and reactions.

Case Studies

School for Creative Expression

School for Creative Expression is an arts focused school in the urban core of a large Midwestern city. During the school year in question, School for Creative Expression underwent a number of significant changes. First, the school expanded from being a high school serving students from grades 9-12 to a secondary school serving students from grades 6-12. Also for the first time, the school had a predetermined articulation path and a number of direct feeder schools. Students no longer needed to take action to opt in to School for Creative Expression. Instead, they would need to take action to opt out. These changes to the school were met with resistance by many of the staff at the school, who felt that the changes represented a threat to the identity of the school.

Indeed, plans to dramatically expand the staff and student body were made on a very short timeline during the prior spring, and there was consequently very little lead time for school leaders (and teachers) to plan and prepare for the changes. This very short timeframe was problematic on several fronts because a number of the fundamental operating norms and incentives facing the school were essentially reversed in very short order.

Prior to the school year of focus, Creative Expression was an intentionally small school with a student body of approximately 80 students. Students needed to opt in to the school, and students who hoped to attend Creative Expression needed to schedule an initial meeting with the Program Director to show an authentic interest in art and the school. Creative Expression experienced resource scarcity during this time due to the small size of the school, but also enjoyed a fairly high degree of operational autonomy for the same reason -- the school simply was not central to the district's plans. Two years prior to the year of this study, that began to change. The district superintendent stated publicly that she wanted the district to have arts magnet options from kindergarten through 12th grade and announced that Creative Expression would be moving to the downtown area. One of the most sought after schools in the city is the Conservatory for Performing Artists (CPA), a charter school also located in the downtown area, and some school staff speculated that Creative Expression was being positioned as a district counterweight to CPA. In a very brief time, Creative Expression became very exposed to district level changes rather than being buffered from these changes as they had been in the past (Honig, 2009). In short, these changes represented a marked decrease in operational autonomy for the school.

The imperatives facing the staff at Creative Expression thus changed dramatically. In the past, much of the focus at the school had been on recruiting an arts-interested student body. With the introduction of an articulation path, recruitment stopped being a priority. Because Creative Expression moved into the limelight, there was a decrease in

the operational autonomy that staff had become accustomed to. At the same time, the resource deficiencies that had plagued Creative Expression in the past were ameliorated by the school's new level of importance. In addition to the new spending on the school to make it a larger and more auspicious program, the school district increased tablet technology outlays in connection with the district's personalized learning initiative. In short, where school leadership and staff were accustomed to focusing attention on making do with fewer resources and actively recruiting students to keep the school financially viable, they were now called upon to manage a rapid expansion of available resources.

The school leadership and teachers struggled to rise to this challenge. Many staff members' views were that the matriculating middle school students were either apathetic or disdainful for art programming. One teacher noted simply, "these students don't care about art. They don't like art. And we are an art school -- the whole idea of our school is that we use art to get students engaged in school so that they can get through the classes they don't like as much. If we get a student who doesn't care about art, we can't do much for them." Both the veteran teachers at the high school and new teachers at the middle school argued strenuously that future classes should be screened for interest in art so that both teachers and students could find the arts programming more satisfying.

Despite courteousness between staff and calls by schools leaders to collaboratively plan a multi-year curriculum, the high school and middle school remained largely unintegrated at an organizational level. One teacher at the middle school noted, "it

doesn't really feel like one school. It feels like two schools in one place." A high school teacher pointed out, "[the high school teachers] had a way of doing things, but the middle school is almost half the staff. We didn't get a chance to know them. And, their challenges are different than our challenges; their students are different than our students." Staff at both schools felt warmly toward each other, but programs developed in parallel rather than integrating.

The degree of student engagement, as measured by both discipline and academic achievement, decreased. Proficiency levels on state tests for the new middle school students hovered in the single digits or low teens in percentile terms. Scores fell at the high school as well. Worse, although the school previously had an average but consistent academic reputation, it had been seen as a caring community: this began to change as well. There were several multi-student fights in the middle school, and, in the Spring, several middle school students were arrested for drug possession -- they had been storing drugs in their locker for high school students.

As the year progressed relations between teachers and school leaders deteriorated as the Principal's efforts to regain some lost operational autonomy (for example, vetting students for interest in art) were stymied by the district. One teacher said, "look, [the principal] is nice, and I like her personally. But I don't think she is effective. She can't maintain order, and she doesn't have any pull with the district. I think we are on our own, and it doesn't feel like our school anymore." At the end of the school year, two out of the three administrators resigned,

along with all but one member of the new middle school teaching staff. About one third of the high school staff resigned as well.

Expeditionary Adventure High School

Expeditionary Adventure High School was an expeditionary learning model alternative high school in the upper midwest. Expeditionary learning means, essentially, that taking students on "expeditions" in the form of service trips, camping trips, or other adventures out of the school building comprised a major component of the school's curriculum. The majority of the teachers at Expeditionary Adventure, as well as the director of the school, focused their expeditions on outdoor education (i.e., camping, hiking, canoeing, etc.). The social studies teacher focused primarily on service learning opportunities. In this school, disruptions initially focused on eliminated positions in the school that ultimately affected the expeditions the school was able to undertake.

Although expeditions were central to Expeditionary Adventure's identity as a school, the majority of the schooling at Expeditionary Adventure looked quite similar to that at other schools. Expeditionary Adventure's student body was composed of students who were making no or very slow progress toward graduation at traditional public high schools. These students may have been referred to the alternative high school system for a variety of reasons including truancy, behavioral infractions, or general academic failure. Expeditionary Adventure was operated by a nonprofit organization that operates various social service programs. The local (urban) school district contracts with Expeditionary Adventure's overseeing organization, as well as other

nonprofit organizations, to run alternative high school programs for students not making satisfactory academic progress within district schools.

During the summer prior to the school year in question, the organization sponsoring Expeditionary Adventure substantially reorganized their education services branch, which included three contract alternative high schools, under a directive from the new CEO to ensure that all branches of the organization were financially self-sustaining. Concerns about cost at Expeditionary Adventure High School led to the elimination of several administrative positions and the collapsing of their job duties into the position of an assistant director. The rate of pay for the assistant director was set substantially below that of any of the eliminated positions, and none of the people whose positions were eliminated applied for the role of assistant director. Later, in January of the school year, the position of director was eliminated at all three of the organization's contract alternative high schools. This meant that the only administrative position remaining at Expeditionary Adventure High School was that of the newly hired assistant director.

In the case of the removal of the director at Expeditionary Adventure high school, and the subsequent promotion of the recently hired assistant director, there were several reasons to suspect that the change would be difficult. The distinctive vision of Expeditionary Adventure high school was that expeditionary educational experiences were a good way to help students connect their learning in school to their lives outside of school. The teachers and director of the school had been operating under this vision

for four years. The new assistant director, a National Board Certified Art teacher, was very interested in student relationships and rigor, and had neither worked in an expeditionary learning school nor been camping since her early childhood. The characteristics of the new assistant director threatened or undermined several of the narratives that staff told about Expeditionary Adventure High School, particularly stories about the qualifications of the director in the expeditionary learning field and of staff collaborations on new ways to use expeditionary learning to engage students. One teacher pointed out, "the reasons these kids are here is that regular school wasn't working for them. Their old teachers wanted good relationships too, but it wasn't working. We have to do something different here... it still doesn't work for all the kids, but if we aren't different than we're nowhere."

Hofstede's (1983) investigation of differences in national culture also sheds some light on the reaction of the staff to the administrative change at Expeditionary Adventure High School, especially the concept of power distance -- the extent to which less powerful members of an organization accept and expect that power is distributed unequally. The teaching staff at Expeditionary Adventure were accustomed to a very low power distance under the original director. There were several reasons for this: for one, the school staff was very small, meaning that everyone needed to play an active administrative role in making the school run. Moreover, expeditionary learning is by nature inquiry-based, so staff were used to asking questions of one another and the school director in order to make decisions about the school. The new assistant director had not yet been fully accul-

turated to low power distance culture, and her management style assumed a greater power distance than school staff members were accustomed to. One can only conjecture as to the reasons the new assistant director so rapidly and strongly tried to assert authority over the staff, but there are several possible reasons. First, the new assistant director was a young first-time administrator working with a staff who had several years of experience working together. Second, the new assistant director was mandated by administrators at the overseeing organization to change the operational procedures at the school. Whatever the reasons, the new assistant director used a management style that assumed much greater power deference than the teaching staff at Expeditionary Adventure High School were used to giving, and the staff felt threatened by her approach.

This threat was compounded by one of the new assistant director's first actions: she announced a review of the financial feasibility and educational quality of the camping and service trips that the teaching staff had planned together the previous summer. Although the assistant director assured the teaching staff that these reviews were pro forma, to the staff the review represented a threat to one of Expeditionary Adventure's central symbols. The teachers responded by compiling research on the benefits of expeditionary learning and refusing to engage in reviews of planned trips at staff meetings. Interpersonal relations at the school grew very tense.

The cultural discrepancies between the new assistant director and the teaching staff, and the perceived threat posed by the new assistant director to the central symbols of the school created a toxic environment where

the new assistant director's initiatives were resisted as a matter of course. Even when no changes were made to the school's expedition schedule and the new assistant director ceased efforts on every change she'd hoped to make at the school, the trust at the school had been so badly eroded that no reconciliation was possible. The staff limped to the finish line and the school closed at the end of the year.

Analysis of Cases

Although distinct in some ways, the cases of both Expeditionary Adventure High School and School for Creative Expression share some important similarities. The disruptions of each school occurred when the schools had fairly low levels of resilience but a relatively favorable preexisting situation (Limnios, et al., 2014). School for Creative Expression faced deprivation as far as resources, but had designed an intentionally small program with a relatively stable cohort of students and a comprehensive theory of how the school worked best: by engaging students interested in art through heavy arts programming and arts integration into academic subjects. Expeditionary Adventure High School was very similar; a purposely small school that engaged students through expeditionary programming. Each school was an example of what Limnios and his co-authors (2014) call "situationally dependent" (p. 109). Both schools were characterized by a relatively favorable status quo (at least in the eyes of teachers), but neither school had the resilience to weather adverse disruptions because of their small size and high dependence on the school district/operating organization.

Similarly, at the time of the disruption, both schools were characterized by low pow-

er distance (Hofstede, 1983) and high tolerance for dissent (Tourish & Vatcha, 2005, p. 455). At Enron, the emphasis on conformity had the effect of dampening any notion that there was likely to be a disruption of the status quo: it dampened and individualized any sensemaking that followed events until the situation became critical (Tourish & Vatcha, 2005). In the cases of Expeditionary Adventure High School and School for Creative Expression, the disruptions were amplified by the initial organizational context, and this organizational attribute also shaped the sensemaking that followed.

Unfortunately, the sources of data for this study are limited to interviews and observations with school leaders and teachers and do not include discussions with district-level decision-makers. Consequently, it is difficult to know for certain the rationale that these leaders would offer for the changes at Expeditionary Adventure High School and School for Creative Expression. However, it is possible to construct a secondhand account of these rationales, and, especially, of the way teachers made sense of the rationales.

What emerges as the critical lever for sensemaking at both schools is the role of emotion. Teachers at School for Creative Expression thought that the school district's decision-making was couched in a desire to expand the availability of arts programming in the city. They acknowledged (and appreciated) that the district was making significantly more resources available to them. Similarly, teachers at Expeditionary Adventure High School saw staff reductions and the review of planned expeditions as based in a need to save money and balance the

school's operating budget for the future. In important ways, teachers could articulate a reasonable cognitive rationale behind the changes. Although the changes were significant, teachers understood that most of their day-to-day teaching practice in classrooms would not be immensely changed. Unlike the fire at Mann Gulch, these changes had the potential to be a small, manageable "10:00" fire (Weick, 1993, p. 635).

On the other hand, the emotional symbolism of the changes, from the perspective of staff, was tremendous (Maitlis & Sonenshein, 2010). Threatening expeditions, or the centrality of students interested in art, was an assault on the core identity of the school as teachers understood it. Further, dramatically increasing the size of the student body (at School for Creative Expression), or changing the nature of how teachers and school leaders interacted (at Expeditionary Adventure High School) exacerbated this identity threat. Although teachers may have understood, cognitively, that the scope of the changes was fairly limited, their emotional sensemaking indicated that "little things suddenly... can become big as hell" (as cited in Weick, 1993, p. 641).

Emotional sensemaking has implications for whether sensemaking is primarily individual or social, as well as whether it is primarily prospective or retrospective (Maitlis et al., 2013). At both schools, the emotions triggered by the disruptions were generally global rather than self-conscious. Because the organizational culture at both schools was characterized by a tendency for teachers to speak their minds, there may also have been a general tendency toward social sensemaking in the face of a common stimulus. At Expeditionary Adventure High School,

teachers interacted frequently and placed high degrees of trust in one another. The distinct outsider status of the new assistant director meant that school staff turned to one another for sensegiving, and the stories they told one another only amplified the adverse nature (Louis et al., 2013, p. 42).

At School for Creative Expression, the story is slightly more complex. For the high school teachers, social sensemaking occurred similarly to the situation at Expeditionary Adventure High School. Although the principal at School for Creative Expression initially had more credibility as a sensegiver, her credibility waned as teachers perceived that she would not be able to convince the district to change course and screen students for interest in art. The social sensemaking shifted over the course of the year from a stance of problem solving to one of bemoaning teachers' collective powerlessness in the face of changes.

Initially, sensemaking for middle school teachers tended to be more individual: middle school teachers experienced the schools' growing problems with academics and behavior as deficiencies in their own teaching and classroom management practice. Their emotions were primarily negative self-conscious emotions such as shame. Over time, as personal relationships between middle school and high school teachers grew, middle school teachers also adopted the narrative of teacher powerlessness and loss of the schools' identity fomented by the high school teachers. Consequently, sensemaking became less individual and more social for middle school teachers as well. In some ways, the resignation of middle school teachers at the end of the year can be seen as a principled self-purge: the expansion of

the school is the problem, and so to the extent that one is complicit in the expansion, removing oneself is the solution.

This way of viewing the middle school teachers' actions is persuasive in another way as well. Emotional sensemaking consisting primarily of negative valence emotions tends to be associated with retrospective sensemaking (Maitlis et al., 2013). For middle school teachers at School for Creative Expression, retrospective sensemaking was impossible: their only reference point was a time in the school's history when they were not there. At both schools, retrospective sensemaking led to resistance as staff tried to limit the impact of changes and retain as much of the pre-disruption character of the schools as possible. Ultimately, in the face of the changes at Expeditionary Adventure High School and School for Creative Expression, staff members were not able to creatively generate a new way of being, nor were they able to reconcile the perceived threats to the schools' identity in a way that meaningfully connected to the schools' past. The result is that neither school survived.

At first blush, the distinctions between an outfit of smokejumpers overwhelmed by a fire and the staff of a changing/expanding school struggling to deal with changes seem profound. However, the above analysis indicates the utility of a sensemaking lens for school failure.

Weick (1993) suggests that at Mann Gulch, part of the challenge faced by the firefighters had less to do with the smallness of the group and more to do with the lack of communication between group members. The implication of Weick's analysis is that *group size* is a somewhat dynamic construct

having more to do with the strength and density of ties between group members than simply how many people are in a group. In the case of both School for Creative Expression and Expeditionary Adventure High School, the number of teachers was small, but unlike at Mann Gulch, communication between teachers was fairly high. Teachers were used to communicating with one another to make meanings out of situations (Louis et al., 2013).

Additionally, unlike at Mann Gulch, teacher relations were characterized by a high degree of empathy, agreement, and candor, not merely an alignment of action (Weick, 1993, p. 647). Although the teachers at each school had a great deal of work related to lessons in their discipline area where they did not interact with other teachers, teachers nonetheless had strong emotional bonds and many shared agreements about the purpose and aims of the school. At School for Creative Expression, there were two distinct groups of teachers for much of the year (the middle school and high school teachers), but the bonds within each group were strong. By the end of the year, the bonds between groups were strong as well.

These distinctions between each school and the firefighters at Mann Gulch are important. Weick suggests that the lack of close ties and communication between firefighters doomed them in the face of an existential challenge because they were unable to muster a collective response. The staff at Expeditionary Adventure High School and School for Creative Expression had much closer ties and better communication. Indeed, in both cases, teachers initially did try to mount a collective response. At Expeditionary Adven-

ture High School, teachers tried to share the benefits of expeditions with decision-makers, while at School for Creative Expression, teachers tried to screen incoming students for interest in art. These initial strategies did not produce the desired results from the perspective of teachers, indicating that close ties and communication may be a necessary but not sufficient way to prevent collapses in meaning.

As teachers' sense of meaning (in terms of the identity of the school) collapsed, they turned to social ties. Weick (1993) suggests that if people pay greater attention to role frameworks when faced with a collapse of meaning, they will be able to construct new meaning by restructuring their social ties (p. 646). In the cases of both schools, though, motivation appears to have become a critical issue in the construction of meaning. There were widespread negative emotions amongst the teaching staff at each school about the direction the school was headed, and any prospective vision of the school seemed wholly unaligned with their past understandings (Maitlis et al., 2013). The meaning that appears to have emerged from teachers' attention to social ties appears to reflect their deep unease with changes at the school, and ambivalence as to whether they should remain committed.

Finally, Weick suggests that the disaster at Mann Gulch can be viewed as a dramatic failure of leadership because the leader did not promote norms of inquiry, advocacy, and assertion. The cases of Expeditionary Adventure High School and School for Creative Expression can certainly be seen this way as well. Compared to the prior director, the newly promoted assistant director at Expeditionary Adventure sought to limit teacher

freedom and enact greater power distance (Hofstede, 1983). The assistant director actually did produce greater teacher advocacy and assertion, but largely in response to her own efforts to exert greater control. Teachers did not view the new assistant director as legitimate and did not feel that she represented their interests.

The story at School for Creative Expression was slightly different. Although the principal did not seek to limit inquiry or assertion, teachers eventually concluded that she was unable to effectively represent their interests to the school district. Relations between teachers and the school leader worsened, as many of the teaching staff lost their faith in the school leader as a conduit for them to exert power. From the perspective of teachers at each school, leadership was ineffectual. They seemed to be leading the teachers into the fire, rather than away from it.

As the above analysis indicates, the staff at each school had significant assets to meet and surmount challenges relative to the firefighters at Mann Gulch. They were more ac-

customed to close and open communication, and had significant emotional ties. They were able to turn to their social ties when a situation challenged the meaning of their work. In both cases though, leadership failures played a significant role: the leaders in both schools were unable to allay teachers' concerns, and at Expeditionary Adventure High School in particular, many staff members felt that the school leader made the problem worse.

One key distinction between cases of school failure and escaping fire is the role of motivation. While teachers at both schools were strongly tied to the school, challenges to the school were not an existential threat. Thus, although teachers had strong motivation to preserve the school, the motivation was not limitless: there was a point at which teachers would give up their efforts. For nearly all the staff at both schools, the changes eventually surpassed the limits of their motivations to resist.

In addition to structural assets possessed by the teachers, they appear to have had at

Table 1: Weick's Recommendations for Group Structure in these Cases

Weick Recommendation	Characterization at Schools
Frequent, honest communication	Teachers at the schools were highly communicative
Close cooperative ties between group members	Teachers at the schools were used to cooperating with one another
A flexible relationship between meaning and frameworks	Teachers turned to social ties when meaning was challenged, but appeared unable to generate new meanings
Leadership that facilitates inquisitive and assertive communication	Leaders' relationships with teachers deteriorated

Table 2: Weick's Recommendations for Group Structure in these Cases

Weick Recommendation	Characterization at Schools
An ability to perform bricolage to find solutions within the group	Teachers were used to “making do” and could have performed bricolage
An ability to form virtual role systems: to run the group in one’s head so one can fill empty roles	Teachers at the schools were used to filling in for one another at events and programs- they were used to performing one another’s roles
An attitude of wisdom: viewing the past with a both a health regard and a healthy skepticism	Unclear- teachers would likely argue that acted in moderate ways, but school and district leaders might suggest that teachers overreacted
Respectful interaction amongst group members	Respectful interaction between teachers, but not between teachers and school or district leaders

least the capacity (if not the will) to implement some of Weick’s strategies for group resilience. For example, because both schools were small, teachers were used to “making do” with available resources, a form of bricolage. Moreover, because teachers at each school were committed to the school’s specialty (expeditionary learning and arts, respectively), they were accustomed to filling in for one another at school events and programs. They could have run the group inside their own mind (Weick, 1993, p. 640).

Weick’s last two sources of resilience are more problematic. I suspect that teachers would argue they did take an attitude of wisdom. Teachers sought to understand the changes, resist changes that they saw as problematic, and then decided to give up when the changes seemed large and insurmountable. They would not characterize their response as an overreaction because the changes represented a significant and unprecedented challenge to the identity of the school as they understood it. School and

district leaders, who viewed the changes as more moderate, may have argued that teachers were overconfident in their assessment that the changes would have large adverse consequences for the identity of the school. Weick also suggests that respectful interaction can be an important source of resilience. Certainly teachers held one another in high regard and interacted respectfully. However, teachers’ interactions with school leaders steadily grew less respectful, to the point where acrimony ensued. Thus, interactions amongst the “in” group were respectful, but not across the entire line of stakeholders (and especially not interactions between teachers and those who held the most power).

There is at least some evidence that teachers may have had unexhausted sources of resilience available. They had considerable ability to improvise and fill-in roles in order to meet and surmount challenges.

Three overarching lessons emerge from these

cases. First, the way that individuals in a group define a problem helps to determine the effectiveness of resources for resilience. From the perspective of school leaders and district officials, the problem was one of adapting to new students and/or new expectations for programming. It is very likely the solutions to these problems existed within the group. For teachers, the problem was that the school's identity and theory of impact were being undermined by the changes. They did not feel that their skills in improvisation or filling in provided resources to help solve these problems. Second, and closely related, these cases highlight the importance of power in sense-making. Teachers tried to exercise power both within themselves and through their school leaders. When these efforts proved ineffectual, the feelings of panic and futility escalated, leading ultimately to the closure of the schools. Finally, the short time frame of the changes mitigated opportunities for individual sensemaking. Because the changes occurred over a very short timeframe at School for Creative Expression, and during the course of the school year at Expeditionary Adventure High School, the scope of the changes may have seemed larger than if the changes had been carried out more slowly: time attenuates the effect of changes on morale. The seeming suddenness of the changes likely limited the time available for individual sensemaking, which may have resulted in task-oriented actions that made the changes seem more manageable (Louis et al., 2005; Spillane et al., 2002). Instead, the sensemaking was largely social and resulted in actions that led to school failure.

Implications for School and District Leaders

These lessons have several important implications for school and district leaders. First, district leaders need to strive to be *honest brokers* and to prioritize openness at times of school change. At both School for Creative Expression and Expeditionary Adventure High School, teachers felt as though, despite their efforts to offer input, they had no real say in changes at their school. This sense of powerlessness was exacerbated by a sense that the nature of the changes was opaque. The new review process for expeditions at Expeditionary Adventure High School seemed threatening to teachers even though it was accompanied by assurances that the expeditions would not be changed. Similarly, the reasons for allowing in “just any” student at School for Creative Expression ran counter to teachers' understanding of who would be best served by attending the school. Additionally, district and school leaders appear to have largely abrogated their opportunities for sensegiving (Louis et al., 2013). By being less than transparent from the outset, school and district leaders sapped their own legitimacy for supporting teachers' sensemaking. As communications between teachers and other stakeholders worsened, school leaders were unable to shape teachers' sensemaking in ways that may have helped them to view the changes as moderate rather than crisis-inducing.

Second, teachers at the school expressed a sense that changes came “all at once.” This may have increased the magnitude of teachers' response. School and district leaders should strive, whenever possible, to expand the time horizon for changes, and especially to expand the time available for teacher' cognitive and emotional processing of these changes. To be even more specific, school and

district leaders should plan to expose teachers to planned changes in ways that increase the likelihood of self-conscious emotions, to encourage teachers to begin reacting to changes by taking individual action and to encourage deep individual processing (Louis et al., 2005). This approach may also have served to limit teachers' sense of the scope of changes, increase their sense of their own control over the situation, and limited the negative social emotional response to the changes.

Most important though, these cases reveal the need for school and district officials to deeply understand how teachers view the identity of their school, and how this identity bears on teachers' sense of motivation. One reason that the existing education literature has focused on small/moderate change in schools is that school failure and collapse are relatively rare (Bidwell, 2001; Coburn, 2001; Coburn, 2005; Evans, 2007). At both Expeditionary High School and School for Creative Expression, the changes were intended as a moderate-size planned change, but instead resulted in a substantial collapse of the schools precisely because they directly undermined teachers' sense of the school's identity. Meaning collapsed, and negative social emotional sensemaking caused teachers to look backwards and fail to connect the changes with aspirational future changes (Maitlis et al., 2013). Indeed, at School for Creative Expression, the substantial increase in resources accompanying the changes came to be seen as a symptom of the change rather than a potential opportunity. Paying greater heed to teacher emotions and sense of motivation is thus central to improving planned change efforts (Isenbarger &

Zembylas, 2006; Zembylas, 2003). Only by ensuring that teachers can connect changes to possible future goals and aspirations for the school can school and district leaders foreclose the possibility of a collapse like those that occurred in these cases.

Conclusion

The purpose of the preceding analysis has been to apply the lens of sensemaking to school failure. Although a sensemaking framework has been applied to both organization change and organizational failure throughout the literature on organizations writ broadly, it has generally focused on moderate change situations in education (Evans, 2007; Maitlis & Christianson, 2014). One reason for this is that school collapse is relatively rare (Bidwell, 2001). Nonetheless, as the above cases indicate, changes initiated with the intention of being moderate and manageable can sometimes trigger a fatal loss of meaning similar to that experienced by the firefighters at Mann Gulch (Weick, 1993). Indeed, even though the teachers at each school in this case had greater structural resistance to collapse, as well as resilience resources unavailable to the firefighters at Mann Gulch, they were unable to meet and surmount the challenges to their respective schools' identity.

One reason has to do with motivation: after teachers initial efforts at communication and resistance were stymied, they gave up. Because teachers made sense of the changes socially and emotionally, their negative response was reinforced by the response of their peers. Teachers also began to feel increasingly powerless to control their own situation. One can imagine that, although motivation to escape a terrifying fire was not an issue at Mann Gulch, the outcome for the firefighters

may not have changed if many did not feel that success was within their locus of control.

One important question largely unanswered by this analysis (or by preexisting literature), is how particular attributes of cognitive sensemaking may be linked to whether sensemaking is prospective or retrospective, or whether sensemaking is primarily a social or individual process. Additional research that sheds light on these relationships could have significant implications for how school and district leaders introduce and manage the cognitive aspects of change efforts, and for whether certain cognitive aspects of change can act as a countervailing force to negative emotional responses.

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