

## Texts, Lies, and Mediascapes: Communication Technologies and Social Media as Risk in the Educational Landscape

Samuel Pelkey, Bonnie Stelmach, & Darryl Hunter  
University of Alberta

### Abstract

Studies have shown how digital communications impact administrators' work, but few have looked at the reputational risks to school administrators incurred through social media and digital communications. This Alberta case study looks at risk through Kasperson et. al's (1988) social amplification of risk framework for an exclusion room controversy. Twitter responses are analyzed and interpreted over a longitudinal, 5-year period. Despite school administrators' perceptions that risk might be generated on social media from community-led, grass-roots sources, traditional figures and agencies such as provincial news media and politicians appear more influential than school administrators, teachers, or parents in the Twitterverse. Implications are drawn for educational administrative behaviour and policy.

*Keywords:* risk, social media, school leadership

### Introduction

*What would be the optics out there in the public? What would the general public think of the school division? ...Would it involve the Minister of Education?...How messy would something get? It would make the front-page news. The trustees would have to deal with [it]. What would the superintendent have to deal with?* (Alberta School Administrator).

*...we want to ensure that our messaging is correct and that it provides appropriate facts... I don't want to have anybody with the ability to criticize or misinterpret a situation.* (Alberta School Administrator)

The above quotations were documented in a study examining Alberta school administrators' conceptualizations of risk (Stelmach et al., 2019). A theme in that study was that social media commands educators' risk attention; administrators obsess with "control[ing] the message...to mitigate risk" (p. 21). Social media was perceived as risk-laden, particularly because it is part of a communication ecosystem that has an instant, global reach. Legal battles, reputation, and safety are some of what is on the line. Parents' perceptions of the school were especially important because of their potential to unenroll their children and cause funding repercussions. The study we report on here was a logical extension of that 2019 study. We sought to understand whether and/or how social media shapes school-related issues into risk issues to warrant school administrators' concerns.

In a provincial scan of trends impacting school administrators' work completed by the Alberta Teachers' Association (ATA) (2019), a principal reported spending extra hours in their day to both preempt and respond to issues emerging from what was referred to as the "parallel universe" (p. 46) of social media. This reflects a national experience. For example, the author of another study conducted for the ATA (2017) concluded "the fallout from social media use in the school community places a significant burden on administrators' time" (p. 41). In general, the erosion of time and space boundaries and

the expectation for expedience that the digital world invites has compelled administrators to be on the job at all times and all days of the week (Pollock & Hauseman, 2019). While these studies have drawn our attention to how digital communications quantitatively impact administrators' work, our ambition was more qualitative in nature. In our study, we were concerned with the "life" that an educational issue takes on because of and through social media and digital communications. In particular, since the initial study identified parents as a key audience that school administrators were most concerned with, we focused on issues with risk potential involving this stakeholder group. We had three objectives:

1. to identify the mechanisms through which school-based events grow into issues for public consumption through social media and digital technologies;
2. to characterize through a lens of risk who the social media participants are that leach an educational event into the public domain; and,
3. to gain insight into the socially constructed nature of risk within the K-12 school-home dynamic.

Our driving questions were (a) how do social media and digital communication technologies shape school-based incidents into risk? and (b) how well-founded are school administrators' perceptions of social media as a platform for generating risk? Our project was informed by the social amplification of risk framework conceptualized by Kasperson et al. (1988).

Based on empirical claims about the correlational and causal effects between parent involvement and student learning (see Shumow & Moya, 2019), parents are considered a target in strategies for school effectiveness and improvement (Teddle & Reynolds, 2000) in policy and practice. Given this, school administrators are expected to set the tone for engaging parents, and much research argues for principals to develop relational power with parents (Sanders, 2009) and to break down barriers between professionals and parents. Relationships, however, imply trust (Kutsyuruba et al., 2010). We know from trust scholarship that risk and vulnerability are the underbellies in trusting relationships (Bryk & Schneider, 2002; Kutsyuruba & Walker, 2015; Tschannen-Moran & Hoy, 2000). Yet, there is hardly mention of the vulnerabilities this may present to school administrators. Currently, how educators take up stories emerging from social media are left to anecdote. Documenting responses to the questions above is an attempt to understand more empirically how risk is socially amplified or attenuated in the educational realm.

In the following, we examine literature that considers risk in educational contexts. Given that we launched the current study from our 2019 finding that school administrators' focus on risk management vis-a-vis parent perceptions, we provide a brief review of educational research regarding parents, and the assumptions that place parents outside of risk discourses. Further, we summarize what have been the foci of educational research regarding social media to demonstrate how our research might offer a conceptual extension in this realm. We then provide a description of the social amplification of risk as conceptualized by Kasperson et al. (1988). A brief summary of qualitative findings from the initial study (Stelmach et al., 2019) is provided, followed by quantitative data we collected from social media to understand the reach and magnitude of a school incident. We conclude with a discussion of the implications for policy and practice.

## The Literature Context

In general, risk can be defined as a willingness to put our assets on the line, whether reputationally, legally, physically, fiscally, or prospectively career-wise. In school contexts, risk assets are commonly characterized in terms of students; students' risk-taking behaviours in health-related matters such as alcohol use, students at risk of academic failure, and adolescents at risk of legal interventions are among topics frequently examined (e.g., Knesting, 2008). Because ensuring student safety is deemed a key school administrative responsibility, risk has been defined in relation to classrooms and the physical site, food, transportation, and environmental hazards (Dunlap, 2013). School violence and bullying, and their impact upon students' mental health have more recently entailed risk definitions that stretch beyond the material (e.g., Cowie & Myers, 2018). These include sociological arguments for schools as vulnerable targets because of the symbolic weight they carry in communities and among the disgruntled who use them as venues of violence to register their position (Lindle, 2019). And the current moment, of course, has put contagion risk at center stage as debates ensue regarding closure and reopening of K-12 schools during the COVID-19 pandemic (e.g., Levinson et al., 2020).

Risk within the school administrator role is a relatively recent research interest (e.g., Hameiri et al.,

2014; Helstad & Møller, 2013; McWilliam & Perry, 2006; Starr, 2012). Principals are subjects in these studies, presumably because risk is considered a consort of public accountability (McWilliam & Perry, 2007). Dempster and Berry (2003) argue that “the educational terrain principals now traverse is strewn with many decision-making dangers” (p. 457). In a three-year study of the learning requirements of principals in Australia, Starr (2012), for example, recorded comments from participants suggesting principals feel like their work is more about risk management than educational leadership. We suspect the same may hold for administrators at any level of the education system, including school trustees.

Parents are increasingly recognized as one source of danger in administrators’ decision-making because of the potential for conflict in parent-teacher dynamics (Beauvais, 2017; DeWeile & Edgerton, 2016; Fernández & López, 2017; Zaretsky, 2004). The ATA (2019) reported that parents were among the top three constraints that kept school leaders from making decisions they knew to be right. But the rallying cry for school administrators is “relationships, relationships, relationships—it’s all about relationships” (McAdamis, 2007, p. 7), and the research on parents’ roles in schooling tends to be idealized and simplified. Even though we know trust and a converse vulnerability constitute risk in strong relationships, the literature on school risk is particularly silent on this when it comes to school administrators working with parents. Presumably, this is because the prevailing discourse in the topic of parent involvement embraces metaphors such as partnership (Christenson & Reschly, 2010; Lareau & Shumar, 1996), and more specifically, *authentic* partnerships (Auerbach, 2012). The emphasis on such an end masks any unappealing underside. In fact, Shuffleton (2017) sardonically suggests parent involvement is a “motherhood and apple pie idea...What’s not to love about parental involvement” (p. 23)? The romanticizing of parent involvement has resulted in school administrators and teachers being targeted in arguments. For example, Mapp and Hong (2010) write that it is not *parents* who are hard to reach. Rather, it is the “institutions and the programs, practices, and policies that school personnel design that are “hard to reach”” (p. 346). In this tradition, foundational texts such as *The Wiley Handbook of Family, School, and Community Relationships in Education* (Sheldon & Turner-Vorbeck, 2019) put emphasis on empowering parents, especially those perceived to be on the margins. Similarly, scholars increasingly argue that teachers should be border crossers (Sanders, 2009), and that schools should be more family centric (Pushor, 2017) and hospitable (Ruitenbergh & Pushor, 2005). This line of thinking assumes parents are interested only in making positive contributions to the school, that their contributions benefit all children, and that all parent contributions are positive. While optimistic, we question these assumptions.

The force of the empowerment agenda has been bolstered by the social justice campaign: much of the literature on parent involvement dwells on flattened hierarchies in pursuit of democracy of voice. At the same time, the empowerment agenda has given parents in some jurisdictions a considerable platform. Consider, for example, the *California Parent Empowerment Act* which was signed into law a decade ago in 2010 (California Department of Education, n.d.). California is one among a handful of states that have “parent trigger” laws, which legally permit parents who are dissatisfied with their children’s schools to petition for “replacing all or some of the staff, turning the school over to a charter operator, transforming it through some programs or closing the school altogether” (para. 1). In our province, a new *Choice in Education Act* (Government of Alberta, 2020) expands parents’ right to support charter schools and protects private independent schools, signalling competition in which parents are key players. A neoliberal environment that incites individuals to secure not only success, but advantage for their children, has intensified parents’ participation in schooling (Crozier, 2019).

Helicopter parenting (Cline & Fay, 1990), hyper-parenting (Honoré, 2008), and now intensive parenting (Doepke & Zilibotti, 2019) has caught media and research attention. Citing longitudinal survey data, Doepke and Zilibotti report that the number of hours that fathers and mothers spend per week on child-rearing activities has increased. Canadian mothers’ time spent child-rearing spiked the highest among six OECD countries reviewed, including the United States, increasing from under 14 hours per week in 1986 to 22 hours in 2010. Time spent by Canadian fathers was less, but also increased the most compared to the other countries. This is interesting on its own, but given that family size has decreased over time, Doepke and Zilibotti suggest these hours are an underestimation. What is most pertinent with respect to our study, however, is *how* parents are spending their time with their children. Doepke and Zilibotti report, “the lion’s share of the new intensive parenting consists of pushing children to become early achievers” (p. 58). This suggests the stakes are higher for parents, and the way they exercise their choices for their children may reflect consumer behavior. Of course, the COVID-19 pandemic reposi-

tioned parents again when schools first transitioned to emergency remote teaching and now in intermittent periods of lockdown as the pandemic persists. Early research suggests parents have new appreciation for teachers' expertise (Bubb & Jones, 2020), but also, having more access to the classroom than ever before gives parents license to critique (Garbe et al., 2020).

Despite the lofty relational goals, in earlier work, Stelmach (2011, 2016) noted tension. For example, in studies of how schools transitioned to parents' elevated role through School Community Councils in Saskatchewan, Stelmach (2016) found that while principals claimed to value parents as important partners in education, they also acted in ways that were "protective and pre-emptive" (p. 280), such as controlling information and limiting parents' input to matters outside the teacher's domain. In another study examining metaphors used when talking about parent roles, one principal described parent involvement as a "double-edged sword" (2011, p. 31), signaling the potential for battle. Stelmach (in press) argued that risk is present even in parents' articulations of their involvement in the school and in relation to other parents. As a composite, these findings suggest that working with parents is not just motherhood and apple pie. But how social media affects these relationships was not a focus of these previous studies. A fundamental problem remains about whether parents are conceived as 'risks' in and of themselves, or whether social media and digital communication technologies accentuate or distort school administrators' risk perceptions.

To date, educational researchers have studied social media for its pedagogical potential, impact on learner outcomes, and learners' experiences (Huang, 2020). Our project departs from current scholarship and seeks a better understanding of how social media and communication technologies shape and/or distort the risk field for educators, and school leaders in particular. Facebook, Instagram, and Twitter are among the most popular social media networks in Canada (McKinnon, 2019), and these networks can provide voluminous and variant data in a short time span (McCay-Peet & Quan-Haase, 2016). Before social media and other digital communications, what happened within a school likely remained in a school, or at least did not stray far beyond (Martin et al., 2018): we have gone from the cultivation of etiquette to netiquette in developing digital citizens. The erosion of boundaries between on- and off-campus activities of both students and teachers, however, has had immediate impact, and the legal and professional consequences of online behaviour are primarily where educational scholars have been invested (e.g., Creighton & Alexander, 2015). The current study, however, was not situated in legal risk, though we appreciate this is top of mind for educators. Rather, we wanted to understand how social media moves information, who the players are, and whether and/or how the information itself can be conceptualized as risk for school leaders.

Risk perception studies were informative for our purpose. And in this field, some attention has been paid to how risk is amplified through social media, which is the core of our current project. For example, in their examination of the amplification of uncontrollable and catastrophic events involving risk (e.g., terrorism), what is called *dread risk*, Jagiello and Hills (2018) noted that as social media messages multiply about a dread risk event, more negative content is created. One's susceptibility to negative content that might amplify one's perception of risk, however, is inversely related to the amount of knowledge an individual has about that particular event. The more educated one is about a particular event, the less they are influenced by negative messages about it on social media. Education about a topic shields the persuasive force of highly emotional messaging, which Jagiello and Hills found to be characteristic of negative messages. What we take from their study is the recognition of the role of emotion in social media communications and how levels of education of parents and other school community members may be a legitimate concern for school leaders who feel compelled to control the flow of information.

Focusing on public response to a health emergency, Zhang et al. (2017) highlighted that not only the velocity of transmission of information impacts how the public responds, but that social media has a contagion effect on the movement of messages. Previous studies have considered social media's broadcasting function in health crises, in which information is sent out in a one-way fashion to the public with the hope of achieving appropriate responses. But Zhang and colleagues' work emphasizes the importance of word of mouth in creating diffuse pathways of information mobilization. The COVID-19 pandemic has been a concrete example of the contagion process—the Internet has been a breeding ground for "rubbish, rumors and fabulism" (Kluger, 2020, para 1) has been a growing concern among health providers and provincial decision-makers, demonstrating that information flows in multiple directions from multiple

sources. This insight was particularly important to our study as it reflects what was found in the initial data collection in which school leaders' interest in controlling the message was directly tied to a fear that in the wrong hands, information could morph into misinformation. Our goal was to understand whether and/or how social media exacerbates risk for school leaders. These studies by Jagiello and Hills (2018) and Zhang et al. applied Kasperson et al.'s (1988) social amplification of risk theory, which emphasizes that risk is a socially generated interpretation. By examining social media as an amplification station, they brought the theory into the 21st century and paved a methodological path that we felt was worth pursuing in the educational leadership context. It is the social amplification of risk framework that we turn to next.

## Conceptual Framework

Theoretically, the social amplification of risk framework put forward by Kasperson et al. (1988) assumes risk is a social experience. While the social amplification of risk is partly contingent upon direct personal experiences, they argue that most risks are not experienced directly, and so other factors or actors—such as the media—have much to do with how individuals interpret and respond to risk.

Kasperson et al. (1988) sought to explain why some hazards that contain relatively low risk (e.g., nuclear energy) evoke strong reaction and response (amplification), and why other hazards (e.g., smoking) seem to be ignored (attenuation) despite evidence that they are high risk (Renn et al., 1992). They proposed that how risk is understood and evaluated is influenced by how one is positioned socially and culturally, and by relevant institutional factors. This has been highlighted during the pandemic: some people interpret the risk in a way that leads to compliance with health measures while others' conditions (e.g., financial status or occupation) lead them to selectively comply or completely ignore directives. How individuals respond is also shaped by other individuals, groups, or institutions, what Kasperson et al. call amplification stations. In their conceptualization, then, risk has a dynamic quality, challenging probability theory which, at the time, was the prevailing theoretical explanation for risk communication.

The social amplification of risk framework is constituted by two processes: informational mechanisms and response mechanisms. The nature of information about a risk event (information mechanism) plays a central role in how individuals evaluate and respond to it (response mechanism). Our study was mainly concerned with how school-based events get positioned in the public sphere through social media because administrators' primary concern was that information not 'escape' or, at minimum, that it be prepared for public consumption in a way that would not cast negative light on the school. It was school administrators' assumption that information itself was dangerous if it landed in the wrong hands.

Kasperson et al. (1988) posited four attributes of information that can shape social amplification. First, the volume of information about an event can itself shape its risk importance. Second, the degree to which facts about an event are disputed can amplify the perception of the event as risk-laden. Third, the dramatization of information is a source of amplification. Events that are sensationalized by media through emotional headlines, for example, or extensive coverage of information through an intricate web of networks spanning from the original source, can create the impression that an event is perhaps riskier than it actually is. Finally, symbolic connotations have the power to amplify (or attenuate) risk, meaning the language that is used to convey information may trigger metaphors to shape individuals' schema regarding an event.

There are also four response mechanisms in the social amplification of risk framework. Heuristics and values are the first response mechanism. Essentially, complex information is shortcut and sorted based on individual knowledge, values, and biases as a natural way in which individuals make sense of the world. A second response mechanism is social group relationships. Kasperson et al. emphasize the political and ideological commitments among groups and argue that these alignments serve as "anchors" (p. 185) for interpreting conflicting information about an event. Signal value constitutes a third response mechanism. An example of a high signal value event is one that either introduces a new risk or elevates the seriousness of an existing one. By comparison, an event with a low signal value will evoke a different response (or non-response) than one with a high signal value. Stigmatization is the fourth response mechanism and refers to the "negative imagery associated with undesirable social groups or individuals" (p. 186), or objects connected to the event.

Although Kasperson et al.'s social amplification of risk theory preceded the media environment we have today, the conceptual framework afforded us a lens through which to understand the interpretive

nature of risk, moving from a constructivist to symbolic interactionist perspective (Crotty, 1998). As noted above, scholars have applied it to understand how digital communications serve as amplification stations (Jagiello & Hills, 2018; Zhang et al., 2017), suggesting its enduring relevance. In finding that school administrators' primary concerns in our risk simulations were those scenarios that involved media (Stelmach et al., 2019), we concluded that school administrators interpret social media not only as powerful but potentially destructive. We wondered, is social media as dangerous a mechanism as those school administrators suggested? How, how far, and by what means does school-related information travel? And does the journey end in disaster for schools? In our study, information mechanisms were useful for our analysis because they afforded us a way to identify the genealogy of an educational event perceived by school leaders as risk-laden. Further, by examining the response mechanisms of an educational event, we anticipated the ability to identify who shapes a risk discourse, and how.

## Methodology and Method

Our study was prompted by and is an extension of a study that aimed to understand how school leaders in Alberta, Canada conceptualize risk (Stelmach et al., 2019). In that study, we adapted Snowden and Gorton's (2003) 'in-tray' simulation by creating a web-based simulation of a school leaders' email inbox and digital messages. They received ten scenarios that involved parent and community member requests or concerns, some of which specifically involved media (e.g., television camera crew shows up at school). In thirty minutes, they had to rank the scenarios in order of their importance in terms of which scenarios they would address first, second, and so on. In the focus groups that followed and based on 11 individual interviews we conducted with school leaders, we concluded that school leaders were adamant about prioritizing any scenarios that could potentially be broadcasted via social media, even if social media was not mentioned in the scenario. For example, a vice-principal said, "anything involving media for whatever reason sometimes takes precedent because we want to ensure that the proper messaging is going out." They were concerned about incidents "blow[ing] up", "spearing someone's reputation", or becoming "inflammatory." These metaphors of war depicted social media as dangerous. Both urban and rural school leaders felt that social media could unravel trust, sully their schools' positive achievements, and negatively impact enrollment.

Given the universal response to social media as a source of risk, we sought to understand whether and/or how their perceptions aligned with an actual case from Alberta in 2015 that has received ongoing media attention over the past few years: the use of seclusion rooms in Alberta schools. By gathering social media data about this case, our goal was to examine how these perceptions played out against the actual behaviour of social media participants during and following a controversial incident.

### *The Use of Seclusion Rooms in Alberta: A Media Case Study*

The case we chose comes from an incident which occurred in 2015 in Sherwood Park, Alberta. A 12-year-old boy with autism attending a school in Elk Island School Division, a school division with both urban and rural school sites, was confined to a seclusion room after an incident in his classroom (CTV News, 2020). His parents were notified 45 minutes after the incident and when they arrived, he was found naked and smeared in his own feces in the seclusion room. The parents said that the use of a seclusion room was not part of his personalized support plan and were distressed by the incident, ultimately transferring him to a different school. In 2018 the parents filed a lawsuit against the school division and Alberta Education alleging that their son's rights to liberty and equal treatment according to the *Canadian Charter of Rights and Freedoms* (Canadian Charter, 1982, section 7, 9) had been breached (Global News, 2018). The suit was filed in early September 2018 and was picked up by news media shortly afterwards.

This incident in particular, drove a wave of controversy about the use of seclusion rooms in Alberta that spilled onto social media. David Eggen, the then Education Minister for the New Democratic Party (NDP) provincial government launched a review of the use of seclusion rooms in and ultimately issued a province-wide ban on their use in March of 2019, only allowing exemptions on a case-by-case basis if parents consented to their use (CBC News, 2019). The ban was due to come into effect in September of 2019; however, a provincial election in April 2019 resulted in a change of government, and the new United Conservative Party (UCP) government repealed the ban in August of 2019. Ultimately, the UCP put the *Standards for Seclusion and Physical Restraint in Alberta Schools* to ministerial order (Govern-

ment of Alberta, 2019), allowing seclusion rooms as a last resort when students presented a threat to themselves or others. The order standardized their use and design and included a provision that parents be notified immediately if their child was placed in a seclusion room (CTV News, 2019). The lawsuit against the Ministry of Education was ultimately dismissed. At this time, the case against the school board is still waiting to be heard (CTV News, 2020).

We focused on a case study on seclusion rooms in Alberta for several reasons. First, the level of attention and controversy it received makes it an excellent example of both volume and dispute informational mechanisms within Kasperson et. al's (1988) social amplification of risk framework, with high potential for dramatization as well. The issue was polarizing, with groups arguing against the use of seclusion rooms as a violation of rights, while others, including the Alberta Teachers' Association (ATA), argued that they were necessary for teacher and student safety (The Star Calgary, 2019). This is a clear example of a dispute as theorized by Kasperson et al. Second, the case exemplified the fears of school leaders as described in Stelmach et al. (2019): a localized incident at an Alberta school that reached social media and created a controversy where school leaders could not control the message. Finally, as a disputed event that received considerable media attention in Alberta in recent years, we had reason to believe that there would be large quantities of data available for the case study.

### *Data Collection and Data Analysis*

We gathered data from the Twitter Full Archive Search Tweets Application Programming Interface (API) using the coding program *R* and the *R* package "rtweet" (Kearney, 2019). This allowed us to access the entire historical archive of publicly available Tweets about seclusion rooms in Alberta in plain-text form for analysis. Activity on other social media platforms such as Facebook, Instagram, WeChat, or TikTok was not investigated. We chose to use Twitter because the majority of Tweets are public and because Twitter allows access to its API for research purposes. We collected all Tweets from January 1, 2015, to December 31, 2019, matching the search terms "(seclusion room OR seclusion rooms) (Alberta OR Edmonton OR Sherwood Park)". The date range ensured that we would get any relevant Tweets over the time period from the initial incident of our case study to relatively close to the present, while excluding any complications caused by the COVID-19 pandemic beginning in early 2020. The search terms themselves were designed to be inclusive of any Twitter communication mentioning the use of seclusion rooms in Alberta and our specific case study. We chose not to use geo-location data because the vast majority of Tweets are not location encoded and because we did not need to ensure that all of our data came from Alberta. Social media discussion of an Alberta seclusion room incident as provincial incident by people outside of the province would itself be an interesting line of research to be pursued later, illustrating the way extra-provincial discourse can amplify a within-jurisdiction matter. Altogether, we collected 1457 Tweets for our terms and date range.

We analyzed our data along three factors: time of creation, content creator, and content. This allowed us to examine how the discussion on Twitter evolved over time (which helped us identify what stimulated spikes in Twitter activity), who was most influential in the conversation, and how dispute and dramatization played a role in Twitter activity. To enhance our analysis of who was influencing the Twitter conversation we created a "total engagement" measure, which is the sum of the number of favourites (analogous to Facebook "likes"), comments and re-Tweets a Tweet received. We sorted the data according to total engagement. Then we manually coded the top 100 Tweets based on the type of content-creator in order to distinguish different types of interested groups from private citizens. This categorization helped us test the perceptions of school leaders about individuals in the smaller school community prompting an explosion on social media. We chose to code only the top 100 Tweets for total engagement because there was a significant drop in total engagement outside of the top 100, and because social network scholarship indicates that social media networks tend to follow a power law distribution where influence is concentrated in nodes of activity which shape the network as a whole (Clauset et al., 2009; Johnson et al., 2014); one power law distribution is the Pareto principle which suggests that 80% of the power or influence derives from 20% of participants. We expected the top Tweets in our sample for total engagement to have had the most influence on the conversation on Twitter as a whole.

To look at dispute and dramatization, we examined the content of the Tweets in our sample using the sentiment analysis capabilities of NVivo (released in March 2020). We used NVivo's automated sentiment analysis tool to code Tweets in our sample into five categories of sentiment: very negative,

moderately negative (collectively “negative” with very negative), moderately positive, very positive (collectively “positive” with moderately positive), and neutral. We then used NVivo to compile the most frequent words (excluding stop words) in our sample as a whole, as well as in the negative and positive categories, so that we could examine the content of different sentiment groupings.

## Findings

In using Kasperson et al.’s social amplification of risk framework to guide our analysis, we were immediately aware that the four elements of information mechanisms overlap, and that the response mechanisms are internal and were difficult to study from our data set (although Tweets may be indicative of some of the response processes, this was not the focus of our study). For these reasons, in the following, we address the information mechanisms in turn, noting the interplay. Our data suggested that it was the lack of response from school personnel that told the story.

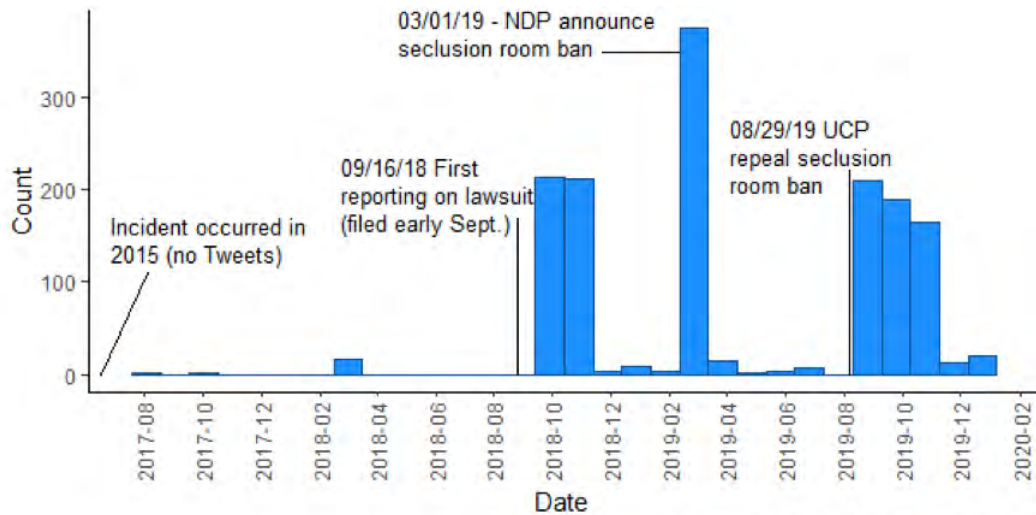
## Volume

Looking first at volume, we can see in Figure 1 that there are distinct spikes in our data, specifically in October of 2018, March of 2019, and September to November of 2019. These correspond respectively to the initial filing of the lawsuit against the Ministry of Education and the school board, the NDP government’s ban on seclusion rooms, and the succeeding UCP government’s repeal of the ban in August 2019 and ensuing guidelines for seclusion room use in October. It’s worth noting that despite the fact that the initial incident occurred in 2015 and that other parents reported having similar complaints during the same time period, there was almost zero Twitter activity about Alberta seclusion rooms until after the lawsuit was filed and subsequently picked up by news media – even then, it took several weeks for the issue to build through October and November of 2018. Notably, this is despite Tweets by activist groups in 2017 and earlier in 2018 attempting to drum up support for the issue which were largely ignored. The other spikes in the data follow a similar pattern to the first, coming shortly after major political announcements which were picked up by news outlets. The March 2019 spike is slightly different because Minister Eggen announced the ban on Twitter (his announcement Tweet is the most engaged within our sample) which resulted in an immediate reaction as opposed to the time delay of the other spikes. This is significant because it shows that all the major periods of Twitter discussion followed major real-world developments announced by figures of traditional social influence: either politicians or the traditional news media. There was no significant conversation generated by community members, only from engagement by these traditional media sources. It is also worth noting that schools were not present as drivers of any of these major spikes.

Following Kasperson et al.’s social amplification of risk framework, these spikes in the volume of information on social media about the case likely increased the perception of risk around seclusion rooms among the general public. Based on Jagiello and Hills (2018)’s finding that an increase in social media messaging about an event increases leads to negative positioning of the issue, we may also conclude that these spikes in volume may have led to an increasingly negative turn to the perception of seclusion rooms by the public. When examining dispute, the second information mechanism in Kasperson et al.’s (1988) framework, this appears to be the case. This is discussed next.



**Figure 1**  
*Tweet Volume by Month*



Based on data collected from Twitter

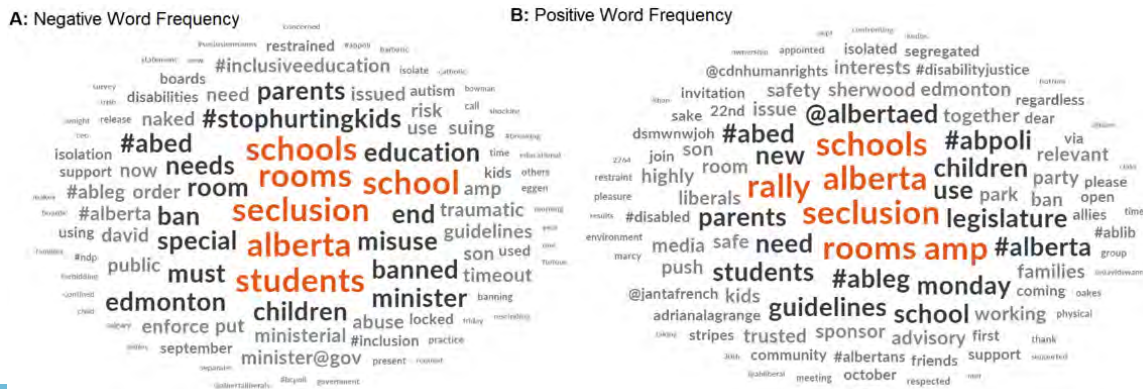
*Dispute, Dramatization, & Symbolic Connotations*

Turning next to the more content-related informational mechanisms of social amplification of risk, we can see from our sentiment coding in Nvivo that seclusion rooms are indeed disputed. Table 1 shows the distribution of Tweets in our sample between the different sentiments identified by Nvivo, while Figure 2 shows a side by side comparison of the content of the negative and positive categories, demonstrated by a word cloud based on the frequency of non-filler words in the sample (with larger words being more frequent in the respective sentiment grouping and vice versa – see Appendix A for the full list). Taken together, they clearly show two sides of the discussion in opposition to each other, although the data skews significantly more towards the negative sentiment than the positive.

**Table 1**  
*Tweets Coded by Sentiment*

Sentiment	Very Negative	Moderately Negative	Moderately Positive	Very Positive	Neutral
Count	148	462	124	59	664
Percentage	10.16	31.71	8.51	4.05	45.57

**Figure 2**  
*Comparison of Sentiment Word Frequency*



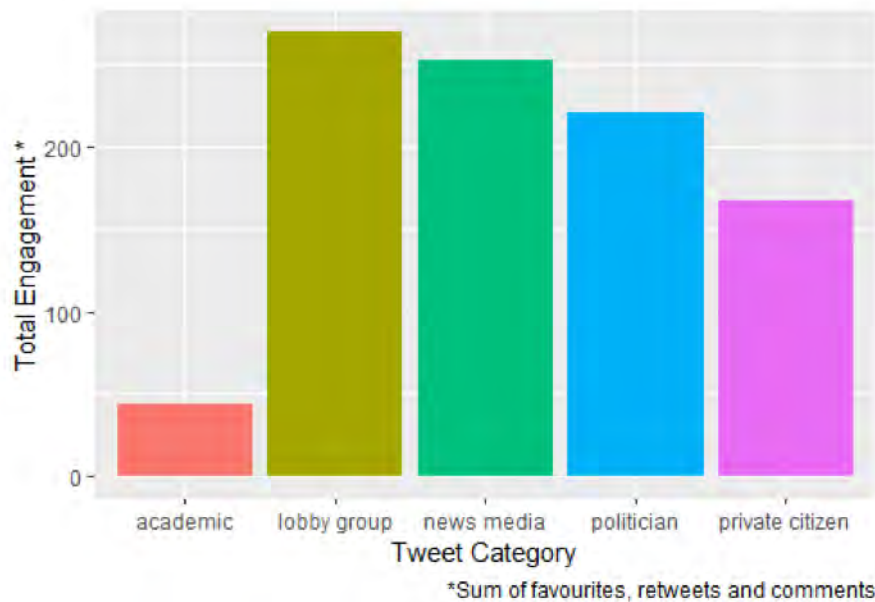
The content of the word clouds in Figure 2 captures the nature of the dispute with words like “traumatic”, “abuse”, and “naked” appearing more frequently in the negative sentiment than in the neutral (not shown), while the positive sentiment shows words like “need”, “safe”, and “trusted” more often than in the neutral word frequency. Based on this, it appears that there is a differing view towards the use of and need for seclusion rooms, which according to the social amplification of risk framework should increase the perception of risk about the issue. It is also worth noting how the two groups create a polarizing contrast and draw upon symbolic language in their word frequency: the choice of words like “naked” and “locked” as well as the hashtag “#stophurtingkids” in the negative sentiment illustrate the dramatization and draw upon evocative imagery to make their point, while the positive sentiment group contrasts this with their own use of loaded words such as “safe”, “together”, and “allies”. The presence of this dramatization and the symbolic connotations attached to it may increase the perception of risk following the social amplification of risk theory.

### Creator Type Analysis

Finally, we analyzed the 100 Tweets in a subsample with the most engagement and coded them manually by the category of the user who created them: academic, lobby group/lobbyist, news media/reporter, politician, school affiliated, and private citizen. The amount of engagement each type of user received is displayed in Figure 3. Following the widely-accepted observation of power law distributions in social media and social network science (Barabasi 2009; Johnson et al., 2014), we assume that the Tweets generating the most engagement in our sample are also the most influential on the network as a whole, acting as nodes of interaction. As shown in Figure 3, the level of engagement for Tweets from non-private actors far outweighs those of private citizens. Note that academics are by far the least influential and school groups are not present at all in the top 100, while lobbying accounts narrowly hold the top spot, indicating that they had a significant influence on the direction of discussion that is not picked up by looking purely at the timeline and volume analysis. Most lobbying accounts in the sample argued for special education and against seclusion rooms, so this influence may explain the predominance of negative sentiment.

**Figure 3**

*Engagement Per Tweet Category (Top 100 Tweets From Sample)*



## Discussion

Our study examined actual social media data about how the public responded to an incident in an Alberta school in order to answer two questions: how do social media and digital communication technologies transform school-based incidents into risk, and how well founded are school administrators' perceptions of social media as a platform for generating risk? To answer the first question, we set objectives to identify the mechanisms and participants involved in a school event becoming an issue of public risk perception on social media. We also wanted to see how social media affected the school-home dynamic through a lens of risk. Our analysis shows that, in our case, the main mechanism for school-based events becoming issues of public awareness on social media was transformation of the issue by figures of traditional social influence: it also helps us identify the primary actors in this migration from the school to the digital environment. We found that the primary actors responsible for bringing these events to widespread social media attention were the traditional news media outlets and politicians. This suggests that for educational issues to reach the level of provincial attention, high-profile actors with traditional social influence are key. Social media analysis which relies on a power-law theory reveals that customary holders of power in a polity also hold power in the social media (Clauzet et al., 2009; Johnson et al., 2014). In our sample, it appears that news organizations, lobbyists, and politicians were the most important of these nodes in shaping social media discussion; however, it remains possible that other figures of social influence such as celebrities could play a similar role in other cases.

When examining how this affects the school-home dynamic, what stands out is that both parents *and* schools are missing as significant influencers on the conversation – that is to say, neither school figures nor homes have much influence over the amplification of educational issues. Schools and school-affiliates in particular are almost completely absent from our case under review, with none in the top 100 most engaging Tweets. Elk Island Public Schools, the school division where the incident took place, has no Tweets that appeared in our sample and appears to have made no mention of the incident despite having an active Twitter account since 2009. The Alberta Teacher's Association also made no mention of it on their Twitter page despite publicly making arguments for seclusion rooms for teacher and student safety (ATA, 2019). This indicates that schools played a negligible to minor role in how the conversation developed directly on Twitter, although they may have had indirect effects on the social media conversation by affecting news coverage and political developments, which had an impact on social media. The absence of schools in our Alberta case may derive from a local policy decision which demands that public servants such as teachers and principals not to engage with negative issues on social media. But is the absence of evidence about teachers and principals engagement, also evidence of absent educators in socially-important issues? Regardless of the reason for non-engagement, the absence of these organizations from our case under review means they missed an opportunity to articulate the need for seclusion rooms to the public. Public engagement in the social media by educators could have tempered the predominantly negative sentiments expressed in the Twitterverse. As for parents, they fall into the private citizens' category of our coding—they were vastly outnumbered by the combined influence of lobbyists, news media, and politicians (see Figure 3). Although notable that the mother responsible for launching the lawsuit had a tweet fairly highly ranked in our sample, parents on the whole seem to have exercised little influence in shaping the conversation, except insofar as they were parents engaged through the traditional mechanisms of lobby groups and political organization. Both parents and schools were passive recipients of social media-distributed information and opinion, despite the fact that the issue of seclusion rooms had its primary effects on students who are presumably the focal point of both those groups.

Also notably absent from the social media conversation was the voice of those conversant in the social or physical sciences. Academics were the least engaged in the Twitterverse on this matter (see Figure 3). Presumably, academics have the ability to substantiate or debate comments in an evidence-informed manner, potentially shaping public opinion of seclusion rooms and ultimately, how the Elk Island School Board's actions in the case at hand were interpreted. With negative sentiment as the dominant soundbite, it would make sense that seclusion rooms as a topic would not only be emotive, but that advocacy groups would capitalize on symbolic connotations to advance their ideological commitments. That the provincial government at the time, the New Democratic Party (NDP), was active in the Twitter conversation, and responded with a heavy hand to ban seclusion rooms from all publicly funded schools in Alberta, endorses a one-sided view that discounts any potential benefit for teachers or students that seclusion rooms might offer.

The social media in our case—confined to Twitter in this study but not including Instagram or Facebook or other forms which have emerged over the past two decades—acted primarily as what Kasperson et al. (1988) call an “amplification station”. Social media conversation was driven by traditional figures of social influence. The Twitter medium provided an avenue for signals about the risk event to reach more people and in turn generated new signals (and thus more volume) about the event, which would then increase the likelihood of the public to perceive the event as risk-laden. Returning to our original question of whether school leaders’ perceptions of risk were well founded, our case provides an indication that these perceptions could be improved. The school leaders in Stelmach et al. (2019) often prioritized social media over other concerns including traditional print media, lawsuits, and attention from politicians out of a fear that social media would amplify traditional rumour mills of private citizens and cause more damage to the school’s reputation than other sources. However, in our case, it was these traditional figures of social influence who were responsible for driving social media traffic in the first place, indicating that school leaders might be better served by prioritizing these over small social media spillovers. On the other hand, our case displayed all of the informational amplification of risk mechanisms associated with higher public risk perceptions. School leaders may be right to shun social media – but they might better keep information off the social media by focusing on traditional figures of social influence first. At a meta-analysis level, the fact that social media acts as an amplification station in the magnification of risk could also increase perceptions of risk about social media *itself* for school leaders; that is, events like our case might drive school leaders to perceive social media as a reputational risk because social media attention illustrated their inability to manage, mollify and therefore moderate the public attention to what was happening in their school setting. Such a conclusion accords with Kasperson et al. (1988), who argue that “independent of the accuracy and particular content of information, [the] large volume of information flow may serve as a risk amplifier” (p. 184).

Although our data were insufficient for examining the second stage of amplification of risk—response mechanisms—a better understanding of the flow of information on the seclusion room incident from 2015 provides a backdrop against which we might draw implications for school administrators. First, a school-related incident that appears on social media is an alert to the public authorities, including and perhaps especially parents, to pay attention. While seclusion rooms had been approved practices and employed without incident prior to the lawsuit, the egregious and graphic nature of the Elk Island School Division case has what Kasperson et al. (1988) call high signal value. It puts seclusion rooms on the risk map, so to speak. Depending on a parents’ value position, the school could be viewed as safe and caring because a disruptive student was removed from the classroom, or the school could be viewed as unethical because a disadvantaged student was not only isolated, but apparently unsupervised. This then has implications for if and/or how schools convey critical incidents to their parents and other relevant stakeholders, especially if public perception is considered to impact student enrollment.

Second, as Kasperson et al. (1988) argue, risk is politicized. It is not surprising that lobby groups were active in Twitter regarding the seclusion room case, as the incident served to advance their agenda. The hashtag “#stophurtingkids” has moral overtones, displacing pedagogical arguments in favor of seclusion, or perhaps making positive arguments a non-sequitur. The NDP’s policy reaction ultimately secured this position with its ban. Perhaps, then, school administrators are on the right track in focusing on controlling the message, but rather than trying to prevent information from leaking into the social media universe and being resigned when it does, school administrators might be proactive and engaged with the discussion that ensues once it gets out. This is particularly important since avoiding negative press was a key concern in our initial study (Stelmach et al., 2019). Based on our analysis, it seems the school system remained at the mercy of the public rhetoric.

The above relates to the final element of response mechanisms in the social amplification of risk framework—stigmatization. The Elk Island School Division case clearly led to the stigmatization of seclusion rooms, which was ultimately reinforced by the NDP’s ban. The UCP decision to revoke that decision did not necessarily remove the perception of seclusion rooms as risk-laden. In fact, it may be the case that the risk is amplified owing to lingering public sentiment that was initiated through social media.

### *Limitations and Future Research*

Because our conclusions are drawn from only one case, we cannot generalize: the patterns we observed in our sample may not be present in other areas where a social media controversy has been focused on school events. There are also potential classification issues in our sentiment analysis because of the way NVivo's automated sentiment analysis codes data. NVivo looks at words in isolation within each entry in the data and scores them based on a sentiment scale, with each piece of text being scored based on the balance of words in the entry as a whole. The software designers note that like most text analysis tools, NVivo cannot recognize sarcasm or double negatives and that it does not take context into account (QSR International, 2020). As a result, potential misclassifications of sentiment within the data are possible and could have an effect on the distribution of sentiment and word frequency within sentiment groupings that we used in our analysis. Also, there are many ways in which school leaders' perceptions of risk could be validated in the actual world that are not captured in our data because we have exclusively used Twitter. Most obviously, private citizens could have generated controversy through other forms of social media such as Facebook, Instagram, or text messaging, which were not part of our sample. We were also unable to measure the impact of social media upon the offline parent community – it is possible that even small amounts of social media activity could cause damage to a school's reputation in the community, which would also validate school leaders' perceptions.

Future research on social media risk from a school administrator's standpoint could focus on attempting to address some of these limitations. Research examining the impact of social media directly on the parent community or examining local school-centered social media communities would be a valuable contribution to the field and would help inform administrative decisions where the social media has publicized an issue. It would also be helpful to expand the number and source of cases, although this faces methodological challenges because of the difficulty of obtaining data from sources like Facebook and text messaging. From a policy point of view, a well-crafted local policy that supports school principals in fighting local media fires implies they are better positioned to deal with some risks, instead of blithely allowing district offices and provincial ministries to address the issues, but compounding school leaders' sense of vulnerability. Practically speaking, school administrators or teaching staff might actively intervene in some social media debates: responding to misinformation early and shaping a controversy from erupting around "fake news" or ill-informed gossip can enhance their community stature rather than 'sheltering in place' and being vulnerable to interpretations by non-educators. If risk is putting our student assets on the line, reputational risk is online for school administrators as well.

### **Acknowledgement**

Pelkey would like to acknowledge Dr. Boucher of the University of Calgary for his mentorship in social media research.

### **References**

- Alberta Education. (2018, February). *Overview of revised Teaching Quality Standard*. <https://education.alberta.ca/professional-practice-standards/teaching-quality-standard/>
- Alberta Teachers' Association. (2017). *A national study of the impact of electronic communication on Canadian school leaders*. Alberta Teachers' Association.
- Alberta Teachers' Association. (2019). *Alberta school leadership within the teaching profession 2019: Seismic shifts and fault lines: Experiencing the highs, lows and shadows*. <https://www.teachers.ab.ca/SiteCollectionDocuments/ATA/Publications/Research/COOR-101-26%20School%20Leadership%20in%20the%20Teaching%20Profession.pdf>
- Auerbach, S. (Ed.). (2012). *School leadership for authentic family and community partnerships: Research perspectives for transforming practice*. Routledge.
- Barabasi, A. (2009, July). Scale-free networks: A decade and beyond. *Science NS*, 325(5939), 412-413. <https://doi.org/10.1126/science.1173299>
- Beauvais, C. (2017). An exploration of the 'pushy parent' label in educational discourse. *Discourse: Studies in the Cultural Politics of Education*, 38(2), 159-171.

- Bubb, S., & Jones, M-A. (2020). Learning from the COVID-19 home-schooling experience: Listening to pupils, parents/carers and teachers. *Improving Schools*, 23(3), 209-222. <https://doi.org/10.1177/1365480220958797>
- Canadian Charter of Rights and Freedoms, Part 1 of the Constitution Act, 1982, being Schedule B to the Canada Act 1982 (UK), 1982, c 11.
- California Department of Education. (n.d.). *Parent empowerment*. <https://www.cde.ca.gov/re/pr/parentempowerment.asp>
- CBC News. (2019, March 1). "Eggen issues order to ban seclusion rooms in Alberta schools." *CBC News*. <https://www.cbc.ca/news/canada/edmonton/eggen-issues-ministerial-order-seclusion-rooms-1.5039155>
- Christenson, S. L., & Reschly, A. L. (2010). *Handbook of school-family partnerships*. Routledge.
- Clauset, A., Shalizi, C. R., & Newman, M. E. (2009). Power-law distributions in empirical data. *SIAM Review*, 51(4), 661-703.
- Cline, F., & Fay, J. (1990). *Parenting with love and logic: Teaching children responsibility*. Piñon Press.
- Cowie, H., & Myers, C-A. (2018). *School bullying and mental health: Risks, intervention and prevention*. Routledge.
- Creighton, T. B., & Alexander, M. D. (2015). Social media and texting: The law and considerations for school policy. In F. W. English (Ed.), *The SAGE guide to educational leadership and management* (pp. 225-236). SAGE.
- Crotty, M. (1998). *The foundations of social research: Meaning and perspective in the research process*. Sage.
- Crozier, G. (2019). Interrogating parent-school practices in a market-based system. The professionalization of parenting and intensification of parental involvement: Is this what schools want? In S. B. Sheldon & T. A. Turner-Vorbeck (Eds.), *The Wiley handbook of family, school, and community relationships in education* (pp. 315-332). Wiley Blackwell.
- CTV News Edmonton. (2020, Feb. 4). "Mom feels 'utter disappointment' after appeal dismissed in seclusion room lawsuit." *CTV News Edmonton*. <https://edmonton.ctvnews.ca/mom-feels-utter-disappointment-after-appeal-dismissed-in-seclusion-room-lawsuit-1.4797502>
- Dempster, N., & Berry, V. (2003). Blindfolded in a minefield: Principals' ethical decision-making. *Cambridge Journal of Education*, 33(3), 457-477. doi: 10.1080/0305764032000122069
- DeWiele, C. E. B., & Edgerton, J. (2016). Parentocracy revisited: Still a relevant concept for understanding middle class educational advantage. *Interchange*, 47, 189-210. doi: 10.1007/s10780-015-9261-7
- Doepke, M., & Zilibotti, F. (2019). *Love, money & parenting: How economics explains the way we raise our kids*. Princeton University Press.
- Dunlop, E. S. (2013). *The comprehensive handbook of school safety*. CRC Press.
- Dyer, K., & Lawrence, J. (2019, Oct. 23). "Alberta introduces new guidelines for use of seclusion rooms, physical restraint." *CTV News Edmonton*. <https://edmonton.ctvnews.ca/alberta-introduces-new-guidelines-for-use-of-seclusion-rooms-physical-restraint-1.4651771>
- Fernández, E., & López, G. R. (2017). When parents behave badly: A critical policy analysis of parent involvement in schools. In M. D. Young & S. Diem (Eds.), *Critical approaches to education policy analysis: Moving beyond tradition* (pp. 111-129). Springer.
- Garbe, A., Ogurlu, U., Logan, N., & Cook, P. (2020). COVID-19 and remote learning: Experiences of parents with children during the pandemic. *American Journal of Qualitative Research*, 4(3), 45-65. <https://doi.org/10.29333/ajqr/8471>
- Government of Alberta. (2019). *Standards for the Use of Seclusion Rooms in Alberta*. Ministerial order #042/20190. <https://www.alberta.ca/seclusion-standards.aspx>
- Government of Alberta. (2020). *Choice in Education Act*. <https://www.alberta.ca/protecting-choice-in-education.aspx#toc-2>

- Hameiri, L., Nir, A., & Inbar, D. E. (2014). Confronting uncertainty and risk: The contribution of leadership to school outcomes. *Planning and Changing, 45*(1/2), 48-82.
- Helstad, K., & Møller, J. (2013). Leadership as relational work: Risks and opportunities. *International Journal of Leadership in Education, 16*(3), 245-262. doi: 10.1080/13603124.202.8761353
- Honoré, C. (2008). *Under pressure: Rescuing childhood from the culture of hyper-parenting*. Alfred A. Knopf Canada.
- Huang, L. (2020). Social media-based data collection and analysis in educational research. In E. Kennedy & Y. Qian (Eds.), *Advanced educational research with emerging technology* (pp. 54-77). IGI Global.
- Jagiello, R. D., & Hills, T. T. (2018). Bad news has wings: Dread risk mediates social amplification in risk communication. *Risk Analysis, 38*(10), 2193-2207.
- Jeffery, A. (2019, Oct. 23). "Province releases new standards to prevent misuse of seclusion rooms at Alberta schools." *The Star Calgary*. <https://www.thestar.com/calgary/2019/10/23/province-releases-new-standards-to-prevent-misuse-of-seclusion-rooms-at-alberta-schools.html>
- Johnson, S. L., Faraj, S., & Kudaravalli, S. (2014, September). Emergence of power laws in online communities: The role of social mechanisms and preferential attachment. *MIS Quarterly, 38*(3), 795-808. <https://doi.org/10.25300/MISQ/2014/38.3.08>
- Kasperson, R. E., Renn, O., Slovic, P., Brown, H. S., Emel, J., Goble, R., Kasperson, J. X., & Ratick, S. (1988). The social amplification of risk: A conceptual framework. *Risk Analysis, 8*(2), 177-187.
- Kearney, M. W. (2019). "rtweet: Collecting and analyzing Twitter data." *Journal of Open Source Software, 4*(42), 1829. <https://doi.org/10.21105/joss.01829>
- Knesting, K. (2008). Students at risk for school dropout: Supporting their persistence. Preventing school failure. *Alternative Education for Children and Youth, 52*(4), 3-10
- Kornik, S., & McAthey, K. (2018, Sept. 14). "Parents suing Alberta education officials say son locked naked in seclusion room." *Global News*. <https://globalnews.ca/news/4450292/parents-sue-school-son-locked-seclusion-room/>
- Kluger, J. (2020, July 23). The misinformation age has exacerbated—and been exacerbated by—the Coronavirus pandemic. *Time*. <https://time.com/5870464/coronavirus-pandemic-misinformation/>
- Lareau, A., & Shumar, W. (1996). The problem of individualism in family-school policies. *Sociology of Education, 69*, 24-39.
- Levinson, M., Cevik, M., & Lipsitch, M. (2020). Reopening primary schools. *New England Journal of Medicine, 383*, 981-985. <https://doi.org/10.1056/NEJMms2024920>
- Lindle, J. C. (2019). School leaders' caring for place while addressing fear, moral panic, and control. In R. Papa (Ed.), *School violence in international contexts: Perspectives from educational leaders without borders* (pp. 147-160). Springer.
- Mapp, K. L., & Hong, S. (2010). Debunking the myth of the hard-to-reach parent. In S. L. Christenson & A. L. Reschly (Eds.), *Handbook of school-family partnerships* (pp. 345-361). Routledge.
- Martin, F., Wang, C., Petty, T., Wang, W., & Wilkins, P. (2018). Middle school students' social media use. *Journal of Educational Technology & Society, 21*(1), 213-224
- McAdamis, S. (2007). It's all about relationships. *Journal of Staff Development, 28*(3), 7.
- McCay-Peet, L., & Quan-Haase, A. (2016). What is social media and what questions can social media research help us answer? In L. Sloan & A. Quan-Haase (Eds.), *The SAGE handbook of social media research methods* (pp. 13-26). SAGE.
- McKinnon, M. (2019). *2019 report: Social media use in Canada*. <https://canadiansinternet.com/2019-report-social-media-use-canada/>
- McWilliam, E., & Perry, L. (2006). On being more accountable: The push and pull of risk in school leadership. *International Journal of Leadership in Education, 9*(2), 97-109. doi:10.1080/13603120600697072

- Pollock, K., & Hauseman, D. C. (2019). The use of e-mail and principals' work: A double-edged sword. *Leadership and Policy in Schools, 18*(3), 382-393. <https://doi.org/10.1080/15700763.2017.1398338>
- Pushor, D. (2017, December 6). Familycentric schools: Creating a place for all parents. *Education Canada, 27*(4).
- QSR International Pty Ltd. (2020). *NVivo*. <https://www.qsrinternational.com/nvivo-qualitative-data-analysis-software/home>
- QSR International PTY Ltd. (2020). "Automatically detect and code sentiment." <https://help-nv.qsrinternational.com/12/win/v12.1.96-d3ea61/Content/coding/auto-detect-code-sentiment.htm>
- Renn, O., Burns, W. J., Kasperson, J. X., Kasperson, R. E., & Slovic, P. (1992). The social amplification of risk: Theoretical foundations and empirical applications. *Journal of Social Issues, 48*(4), 137-160.
- Ruitenbergh, C. W., & Pushor, D. (2005). "It's not about colour-coordinating the napkins with the table cloth:" Hospitality and invitation in parent engagement. *Principals Online, 1*(1), 32-35. [http://www.principalsonline.com/downloads/oct2005\\_parentrelations.pdf](http://www.principalsonline.com/downloads/oct2005_parentrelations.pdf)
- Sanders, M. (2009). Collaborating for change: How an urban school district and a community-based organization support and sustain school, family, and community partnerships. *Teachers College Record, 111*(7), 1693-1712.
- Sheldon, S. B., & Turner-Vorbeck, T. A. (2019). *The Wiley handbook of family-school, and community relationships in education*. Wiley Blackwell.
- Shumow, L., & Moya, J. (2019). Student learning: The essence of family, school, and community partnerships. In S. B. Sheldon & T. A. Turner-Vorbeck (Eds.), *The Wiley handbook of family, school, and community relationships in education* (pp. 141-162). Wiley Blackwell.
- Snowden, P. E., & Gorton, R. A. (2003). *School leadership & administration: Important concepts, case studies & simulations* (6th ed.). McGraw-Hill.
- Starr, K. (2012). Problematizing 'risk' and the principalship: The risky business of managing risk in schools. *Educational Management Administration & Leadership, 40*(4), 464 -479. doi: 10.1177/1741143212438221
- Stelmach, B. (2011). Metaphor as insight into parents' conceptualizations of their role in school improvement. In C. M. Hands & L. Hubbard (Eds.), *Including families and communities in urban education* (pp. 17-40). Information Age Publishing.
- Stelmach, B. (2016). Parents' participation on school councils analysed through Arnstein's ladder of participation. *School Leadership & Management, 36*(3), 271-291. doi:10.1080/13632434.2016.1247048
- Stelmach, B. (in press). Using risk to conceptualize rural secondary school parents' sense of community. *The School Community Journal*.
- Stelmach, B., Hunter, D., & O'Connor, B. (2019, June 1-5). *Educational administrators' conceptions of risk in relation to parents and classroom assessment: An Alberta inquiry* [Paper presentation]. Canadian Society for the Study of Education Annual Meeting, Vancouver, BC, Canada.
- Teddlie, C., & Reynolds, D. (2000). *The international handbook of school effectiveness research*. Falmer Press.
- Zaretsky, L. (2004). Advocacy and administration: From conflict to collaboration. *Journal of Educational Administration, 42*(2), 270-286. doi: 10.1108/09578230420525649
- Zhang, L., Xu, L., & Zhang, W. (2017). Social media as amplification station: Factors that influence the speed of online public response to health emergencies. *Asian Journal of Communication, 27*(3), 322-338. <https://doi.org/10.1080/01292986.2017.1290124>



**Appendix A:**

What follows are the 50 most frequent words from our overall sample as well as from the positive and negative sentiment groupings. Note that the sample includes some seemingly nonsense words; these are snippets from repeatedly shared hyperlinks.

Total Sample			Positive Sentiment			Negative Sentiment		
Word	Count	Weighted %	Word	Count	Weighted %	Word	Count	Weighted %
rooms	976	4.64	seclusion	78	3.09	seclusion	282	4.21
seclusion	908	4.32	alberta	76	3.01	rooms	215	3.21
alberta	820	3.9	rooms	66	2.62	alberta	163	2.43
schools	652	3.1	rally	55	2.18	schools	125	1.87
bans	316	1.5	amp	49	1.94	students	106	1.58
using	272	1.29	schools	47	1.86	school	104	1.55
#abed	234	1.11	#ableg	41	1.63	room	82	1.22
ableg	211	1	use	37	1.47	misuse	73	1.09
educators	199	0.95	need	28	1.11	#stophurtingkids	70	1.04
children	176	0.84	@albertaed	27	1.07	special	70	1.04
students	159	0.76	legislature	23	0.91	needs	69	1.03
disabled	157	0.75	parents	23	0.91	end	67	1
new	147	0.7	children	22	0.87	ban	66	0.98
guidelines	146	0.69	students	21	0.83	banned	64	0.95
parents	143	0.68	new	20	0.79	education	60	0.9
need	139	0.66	guidelines	19	0.75	children	57	0.85
minister	131	0.62	monday	18	0.71	must	55	0.82
#abpoli	129	0.61	#abpoli	17	0.67	parents	54	0.81
edmonton	117	0.56	#abed	16	0.63	#abed	52	0.78
inclusive	114	0.54	school	16	0.63	minister	42	0.63
canada	102	0.49	#alberta	15	0.59	edmonton	41	0.61
times	99	0.47	liberals	14	0.56	traumatic	39	0.58
ending	88	0.42	park	14	0.56	ministerial	36	0.54
support	88	0.42	room	14	0.56	order	36	0.54
call	86	0.41	safe	14	0.56	guidelines	33	0.49
now	84	0.4	sherwood	14	0.56	#alberta	31	0.46
public	81	0.39	sponsor	14	0.56	now	31	0.46
release	81	0.39	together	14	0.56	use	31	0.46
restraints	79	0.38	ban	13	0.52	david	30	0.45
#seclusionrooms	77	0.37	issue	13	0.52	abuse	28	0.42
issued	75	0.36	kids	13	0.52	issued	28	0.42
amp	75	0.36	media	13	0.52	public	28	0.42
rally	74	0.35	party	13	0.52	need	27	0.4
misuse	71	0.34	safety	13	0.52	#inclusive education	26	0.39
@abliberal	70	0.33	advisory	12	0.48	amp	26	0.39
living	70	0.33	edmonton	12	0.48	naked	26	0.39

Total Sample			Positive Sentiment			Negative Sentiment		
Word	Count	Weighted %	Word	Count	Weighted %	Word	Count	Weighted %
special	68	0.32	trusted	12	0.48	risk	25	0.37
jns6ahdofo	67	0.32	working	12	0.48	suing	25	0.37
via	66	0.31	highly	11	0.44	#ableg	24	0.36
ndp	65	0.31	interests	11	0.44	enforce	24	0.36
report	64	0.3	push	11	0.44	minister@gov	24	0.36
comes	63	0.3	relevant	11	0.44	timeout	24	0.36
kids	62	0.29	#albertans	10	0.4	disabilities	23	0.34
order	62	0.29	#disabilityjustice	10	0.4	kids	23	0.34
#stophurtingkids	60	0.29	#disabled	10	0.4	locked	23	0.34
boards	60	0.29	22nd	10	0.4	support	22	0.33
government	60	0.29	@	10	0.4	#inclusion	21	0.31
shows	60	0.29	cdnhumanrights	10	0.4	autism	21	0.31
			@jantafrench	10	0.4			