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Principals’ voices pertaining to shared sense-making processes within a generally-outlined pedagogical reform implementation

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ABSTRACT
This qualitative study explores school principals’ perceptions and enactments of shared sense-making processes during a generally-outlined pedagogical reform, i.e. \textit{a broad-policy reform allowing educators to exercise their discretion in meeting its pedagogical goals}, aiming to inquire what makes such processes critical to schools’ collective efficacy within reform implementation. Interviews with 25 high school principals implementing this reform in state and religious-state schools produced data, whose analysis yielded two major themes and sub-themes: (1) Communicating a shared vision: (a) a shared pedagogical vision; (b) a shared values-based vision; (c) a shared vision of pedagogical bluff; and (2) Strengthening school collective efficacy: (a) facilitating a collaborative instructional culture; (b) adjusting school reality toward instructional focus. A shared sense-making process offers a beneficial framework for principals and teachers collectively navigating complexity and uncertainty, while implementing ambiguous pedagogical policy demands within their unique contexts.

Increasing expectations from school systems to become more accountable in preparing students for 21st century challenges require principals and teachers to collaborate and question their pedagogical practices (Pietarinen et al., 2017). Reinterpreting school practices, understanding and enacting reform mandates, principals bring teachers toward the reform, influencing their sense-making process (Grice, 2019). Throughout this process, educators draw upon their own histories, experiences, beliefs, and the context in which they work, constructing a new shared meaning.

Examining policymaking implementation through a social sense-making lens delineates \textit{why} and \textit{how} principals influence which instructional ideas, and what strategic choices determine the promotion of pedagogical practices and their adaption to local conditions. Shaped by social interaction, shared sense-making process is complex, as it entails the translation of new reform ideas into school practices, shaping the content, availability, and flow of information. Maximizing their own local interests, principals’ choices and actions influence the institutionalization of external policy reforms.
Yet, though positioned as individuals of power, authority and influence, principals are also susceptible to the influence of their teachers and depend on them.

Two research questions have prompted this study: (1) how do high school principals perceive and enact shared sense-making processes during the implementation of a generally-outlined pedagogical reform? (2) Which gatekeeping strategies, communication mechanisms and framing activities do high school principals employ while leading their teachers in making sense of and responding to this national reform’s intents and implementation? This study offers an important contribution to the research of sense-making and its role in policy implementation. It calls into question what makes shared sense-making processes critical to schools’ collective efficacy within a pedagogical reform implementation, and indicates implications and future research avenues.

**Theoretical background**

*A generally-outlined pedagogical reform implementation from a shared sense-making perspective*

The continuous motion of shared sense-making in generally-outlined pedagogical reform implementation can be depicted as an interrelated and interconnected process, as illustrated in Figure 1. Implementing a generally-outlined pedagogical reform based on a shared sense-making approach is not a linear but rather a circular, continuous process (Maitlis & Christianson, 2014). Taking a retrospective look at their prior knowledge, experience and beliefs, the school principal and the teachers work together to

![Figure 1. Shared sense-making process in generally-outlined pedagogical reform implementation.](image-url)
understand and process the new ambiguous demands within their social context. Educators collaborate to produce a map of the unfamiliar situation, construct and enact a shared meaning of pedagogical reform demands.

Aiming at shaping a school-led innovative curriculum, a generally-outlined pedagogical reform is a broad-policy reform which allows school principals and teachers to exercise their discretion in meeting its pedagogical goals (Youngs et al., 2011). This reform, also known as an inside-out or a bottom-up reform, addresses the problem of policy incoherence, i.e. gaps between the reform policy and school preferences, or multiple reform initiatives competing with one another. Policy incoherence often affects school improvement negatively, increasing cynicism and generating stress.

The literature about reform implementation reveals that generally-outlined pedagogical reforms may endow teachers with a sense of connectedness and ownership of the reform, but might fail to commit them to its goals (Birkland, 2010). When school principals cannot create a minimally coherent, integrated, and self-consistent ‘organizational self’, (Kraatz, 2009), a broad-policy pedagogical reform will not help establish a clear internal agenda. Such reforms may also fail when district leaders fail to change a top-down authority relationship to a more collegial one, in which school leaders and policymakers integrate together internal and external agendas.

Within the context of a pedagogical reform, ambiguous by definition, educators frame their environment by constructing interpretative mental models to ‘make sense’ of local and external expectations. Since a generally-outlined pedagogical reform inherently involves comprehensive changes, uncertainty, a lack of information regarding practices, alteration of previous working habits and new arrangements, shared sense-making processes provide insights into how principals and teachers attribute different meanings to an ambiguous, confusing and abstruse event (Allen & Penuel, 2015).

Sense-making, i.e. forming a holistic picture of an ambiguous event, involves four interrelated processes: creation, interpretation, enactment (Weick, 2009) and exploration (Ganon-Shilon & Schechter, 2019). First, individuals gather data from various sources (e.g. their own experiences, knowledge, beliefs, and the context in which they work), to explore the broader system and map the situation. Sense-making provides the necessary mapping technique when information is lacking. Maps clarify unfamiliar terrains by illustrating, elucidating and inducing discussion, to contribute ideas for a clearer understanding and render actions more effective (Ancona, 2012). The creation process involves bracketing, noticing, and extracting cues from the actual experience of the ambiguous event. To draw a more organized perception from their initial sense, individuals go through the second process, providing multiple interpretations of the event. In the enactment process, individuals translate their knowledge into actions. This process consists of incorporating new information and eventually taking action, based on the interpretation created previously. The fourth process emphasizes the exploration of different narratives shaping the ambiguous situation. Through dialogue and negotiation, individuals interact to co-create a shared understanding, channeling routines into daily pedagogical practices. Research findings, however, differ on seeing these processes as serial, suggesting that they are interrelated (Kaplan & Owings, 2017).

Viewed from a constructivist perspective, shared sense-making can be seen as a process of social construction, carried out through interaction between people and the context in which they operate. Thus, school principals and teachers confronting a complex problem,
negotiate to build and agree on their understanding of it, based on overlapping internal and external school social contexts (e.g. school culture, policymakers, district, local council, parents, and students). Shared sense-making is a critical precondition for implementation of a generally-outlined pedagogical reform (Pietarinen et al., 2017).

**School principals’ role in facilitating a shared sense-making process**

Seen as a relentless succession of imposed innovations opening gaps between aspirations and capacities, generally-outlined pedagogical reforms around the globe (Sahlberg, 2018) urge school principals to determine whether to truly carry out a process of change, or maintain existing practices. Obviously, effective reform results depend not only on the reform’s conceptual foundations or proper design, but also on its successful realization by school principals leading it in their schools (Gawlik, 2018; Organisation for Economic Co-operation and Development [OECD], 2016b). To mobilize teachers into action, principals need to shape the latters’ sense-making process (Shaari & Hung, 2018). Thus, sense-making of external reform policy is a social practice, bound to activities that have become routine, and systematic, and to the relationships between persons, actions, contexts, environments and cultures.

Implementing a pedagogical reform into their unique culture, principals develop shared school understanding that is ‘in sync’ with the individual school culture. A case study that focused on the stories of Australian principals who led a pedagogical reform in their schools showed that protecting the school culture was vital alongside building good relationship and trust with the educational staff (Simon et al., 2019). No new pedagogical demands seemed more important than protecting existing school values and the characteristics of the school culture. From a social meaning making perspective, building a shared pedagogical framework that is collaboratively developed with the inner school world requires principals to collaborate and communicate shared opportunities in order to prevent production-line pedagogical reform implementation (Grice, 2019).

School principals play an important role in ‘framing’ policy messages for their educational staff by leading a sense-making process with them (Park & Jeong, 2013). Framing is a strategy-forming technique, involving actions that principals take to provide interpretative frameworks and connect them to teachers’ interests, values, and beliefs. Namely, principals motivate teachers to implement particular practices by means of political and persuasive communication. From their position of authority, principals play a leading role in framing, transforming, directing, supporting or constraining teachers’ sense-making of policy demands (Woullfin et al., 2016). Through framing activities, principals can implement a reform partially, deciding which aspects of the reform they might introduce into the school, and which they might filter out. Honig and Hatch (2004) argue that implementation of external policy should be understood as a process of ‘crafting coherence’, in which school actors negotiate multiple external demands in their efforts to achieve internal goals.

The literature also draws attention to principals’ gatekeeping strategies and communication mechanisms at their school boundaries (Honig & Hatch, 2004). As a ‘gatekeeper’ for policy implementation, the principal often determines whether the school works by bridging or by buffering external influences, While the bridging strategy seeks to adapt organizational activities to conform to external stakeholders’ expectations, emphasizing
the organization’s openness to change, buffering is an activity aimed at preventing external factors from interfering with the school’s functioning. Organizations use buffering strategy to either control or resist the external environment (Kim & Kim, 2016). If the external demands are implemented only superficially, without internalization and real change, this would be regarded as buffering, which is ‘not the blind dismissal of external demands but strategically deciding to engage external demands in limited ways’ (Honig & Hatch, 2004, p. 23).

In the context of a generally-outlined pedagogical reform implementation, school principals balance between being pioneers of new pedagogical practices and being preservers of what the school already has established prior to reform implementation (Simon et al., 2019). As ‘pioneers’, principals provide ongoing professional development, emphasizing the new pedagogical agenda. As ‘preservers’, principals provide time for professional conversations to learn, practice, and reflect, to minimize potential feelings of overload by building trust, thus nurturing a collaborative school spirit toward reform (Liefferink & Wurzel, 2017). Moving from the known (e.g. existing school practices) to the unknown (e.g. new pedagogical practices) means demonstrating loyalty to the vision and values of a school while developing shared knowledge and understanding of pedagogical reform demands. Therefore, based on the theoretical framework, the goal of this study is to explore principals’ perceptions and enactments of shared sense-making practices while employing gatekeeping strategies, communication mechanisms, and framing activities to influence teachers’ sense-making of a generally-outlined pedagogical reform’s intents and its implementation.

**Research context**

The Israeli national school system serves more than 2 million students (nearly 5,000 K-12 schools), with approximately 73% in the Jewish sector and 27% in the Arab sector (Israeli Central Bureau of Statistics [CBS], 2016). According to the Gini coefficient for measuring a nation’s distributive inequality, Israel is among the countries with the broadest gap between rich and poor (OECD, 2016a). Mindful of the great diversity among school populations, recent education policy in Israel has aimed at achieving high levels of equality in education outcomes across the board, to narrow the achievement gap through growing pressure on performance. In practice, however, the Israeli student achievement distribution shows low level of achievement combined with a growing achievement gap, as evidenced in various international comparative examination studies (Ben-David-Hadar, 2016).

Israel’s educational system is highly centralized. The Ministry of Education controls the writing and distribution of curricular materials, standards, testing, and teachers’ hiring and firing. While all schools follow a basic national curriculum, they do have freedom to specialize (e.g. in arts, environmental studies, etc.) in accordance with Ministry guidelines. Recent relaxation of urban registration-by-zone regulations has resulted in increased competition between urban schools, but suburban and rural schools continue to operate in a less competitive environment. In spite of attempts to decentralize the school system, such as school-based management and school autonomy (Nir et al., 2016), principals and faculty members still hesitate to act autonomously because the Ministry is not perceived as relinquishing control, despite its declared school-autonomy.
policy. This evolving educational context provides a unique opportunity to explore school principals’ sense-making of a generally-outlined pedagogical reform.

This study focuses on the Meaningful Learning Reform, which was launched in the Israeli school system toward the 2014–2015 academic year, and is currently being implemented. Defining learning as an emotional, social and cognitive experience, the pedagogical reform leans on three coexistent components: ‘relevance to the learner and the teacher, the involvement of the learner and the teacher, and the value of it for the learner and the society’ (Weisblay & Wininger, 2015, p. 61). According to the Israeli Ministry of Education (2014a, p. 2):

Meaningful learning is a personal process of knowledge construction whereby the learners raise questions, locate sources of information, process information and create new relevant information Meaningful learning touches learners’ innermost self by facilitating a multitude of mental, emotional, social, physical, artistic and creative experiences. Such learning leads to the realization of students’ potential, promoting excellence, personal growth and development, while assisting them in delving into subjects that interest them and meet their needs. Students’ and teachers’ meaningful learning occurs through their interaction with their surroundings, and takes place in varied spaces. In meaningful learning processes, the pedagogical and psychological aspects of learning complement and reinforce each other.

Toward changing traditional school pedagogy, the reform encourages educators to apply 21st century practices creatively through meaningful learning and deep understanding. The primary structural change was in high schools, where the curriculum in most disciplines was divided into two components: (1) Knowledge base and skills. This part was mandatory, accounting for about 70% of the curriculum, and measured by the customary external evaluation method (matriculation exams). (2) Broadening and deepening, according to teachers’ interpretations of the Reform. This component accounts for 30% of the curriculum and measured by varied internal school evaluation methods (Israeli Ministry of Education, 2014b). Enabling alternative types of learning while providing merely general terms, high schools were required to design their assessment based on their instructional perceptions of the concept 21st century learning. The Israeli Ministry of Education did not specify ways of applying this change. Instead, it presented the pedagogical framework to stimulate professional discussion among various stakeholders, and to serve as a basis for various staff levels’ work programs, providing examples of meaningful learning as well as a number of tools.

The Meaningful Learning Reform was part of a succession of reforms launched in the Israeli school system. Most of these reforms were based on a top-down authoritarian relationship, with schools being required to follow detailed instructions. There was no room for tailored implementation or creative interpretation. As opposed to previous reforms, the Meaningful Learning Reform was unusual in this regard, allowing school leaders and teachers to exercise considerable discretion about how to meet the broad pedagogical policy goals (Israeli Ministry of Education, 2014a).

Research design

In light of the theoretical framework described above, and as the primary structural change – adding internal evaluation methods – was implemented in high schools, the
current study has explored high school principals’ perceptions and enactments of shared sense-making practices, as they engage in gatekeeping strategies, communication mechanisms, and framing activities to shape teachers’ sense-making during the implementation of the reform. This qualitative phenomenological study delineates a ‘lived experience’ of a phenomenon, focusing on the interactions among the meanings that principals attach to their experiences, behaviors, and narratives regarding the complexities involved in the implementation of the reform (Larsson & Holmström, 2007).

**Participants**

The study participants were high-school principals who implemented the Meaningful Learning Reform. Seeking to maximize the depth and richness of the data, we used maximal differentiation sampling (Creswell, 2014), also known as heterogeneous sampling. It is a purposive sampling technique used to capture a wide range of perspectives, gaining greater insights into a phenomenon by looking at it from various angles. The maximal differentiation sampling was implemented in this study regarding principals’ gender, years of teaching experience, years of experience as principal in general, years of experience as a principal in the current school, education, sector of school, and geographical districts. We did not begin the study with a rigid number of participants but rather defined the study sample on an ongoing basis as the study progressed (Taylor et al., 2016). In practice, we approached 41 school principals, until we obtained 25 principals who could represent a diverse sampling. Thus, the 25 participants (14 women, 11 men) were from all of Israel’s school districts. On average, participants had 17 years of teaching experience (range = 5–35), and 10 years of experience as school principals (range = 1–25). One participant had a bachelor’s degree, 23 had a master’s degree, and one had a PhD.

**Data collection**

Data were collected during the second semester of the 2014–2015 academic year. First, three exploratory interviews were conducted to formulate a protocol for a semi-structured interview designed to explore participants’ personal perspectives (Rossman & Rallis, 2012). The proposed protocol was reviewed by two educational leadership experts, and was revised in line with their recommendations. During the semi-structured interviews, we presented identical questions to the principals, to clarify how they perceived and enacted shared sense-making processes with and among their staff, regarding the pedagogical reform. We asked specific questions to gain deeper insight into principals’ perceptions and actions relating to a shared sense-making process, such as: (1) How do you perceive the generally-outlined pedagogical reform? (2) What factors significantly influence your decisions throughout the pedagogical reform implementation process? (3) In your opinion, how can a school principal influence the pedagogical reform implementation process? (4) How does the educational staff experience the generally-outlined pedagogical reform?

Individual interviews with school principals generally lasted one hour. They were conducted in places chosen by interviewees: their schools, cafes, and other locations. All interviews were audiotaped and transcribed verbatim. Transcriptions were translated from Hebrew to English by a specialist in both languages. All participants were fully informed of the purpose of the study and were promised complete confidentiality as well
as full retreat options. Pseudonyms were assigned to all interviewees (Please see the Demographics for School Principals in Table A1, Appendix).

**Data analysis**

Data collection and analysis took place simultaneously in an ongoing process throughout the enquiry, analysis being a three-stage process: condensing, coding, and categorizing. Having collected the data, we found that not all the material at hand could serve the purpose of the study, and that the data required sorting (Miles et al., 2014). Thus, in the first stage of the analysis (condensing), we looked for the portions of data that related to the research questions. In the second stage (coding), we coded each segment of relevant data (utterance) according to the aspect of the principal’s perception it expressed (Gibbs, 2007).

The agreement rate about coding among the researchers was 100%. In contrast to the previous stage, this stage was data-driven rather than theory-driven: we did not use a priori codes but rather inductive ones, developed by direct examination of the perspectives articulated by participants (Rossman & Rallis, 2012). After capturing the essence of the utterances in the second stage, we clustered similar utterances to generalize their meanings and derive categories in the third stage (categorizing). At this point, we reworked categories to reconcile disconfirming data with the emerging analysis (Richards & Morse, 2013). Thus, we explored the dimensions of categories, allowing the identification of relationships between categories and the testing of categories against the full range of the data. We performed the analysis in two phases: first, we analyzed principals’ voices separately, and next, we analyzed them to generate common themes and elucidate the differences between the voices (Cohen et al., 2011). Generating themes was an inductive process, grounded in the various perspectives articulated by participants (Rossman & Rallis, 2012).

Several measures taken at different stages of the study ensured trustworthiness. First, the diversity of study participants was maintained, in terms of gender, seniority in post, sector of school, and geographical school districts. Second, the researchers conducted the analytical process described above, each analyzing the data independently. At the next stage, researchers met to reflect on the emerging themes and discuss them, as well as to search for data that would either confirm or refute these themes. Third, to evaluate the soundness of the data, we conducted a member check (Schwartz-Shea, 2006) with all participants. We sent transcripts of their interviews back to the principals, with a request to evaluate their responses and if needed make necessary additions or refine them. Using this strategy allowed for an examination of the descriptive data versus the participants’ reactions, that is, for endorsing and solidifying principals’ responses. Apparently, one-hour interviews were insufficient. Therefore, 14 interviewees changed their answers, clarifying their remarks and adding information omitted previously.

In a qualitative exploration, researchers should pay attention to how their backgrounds and personal experiences inform their theoretical and methodological perceptions concerning the inquiry. As the researchers of this study, we have various backgrounds: one of us was a school middle leader for 13 years and is currently an educational leadership researcher, the second was a school principal for 17 years and is currently an educational leadership researcher, while the third has had extensive experience in educational leadership research.
Findings

The data analysis yielded two major themes and sub-themes. The first theme is (1) communicating a shared vision: (a) a shared pedagogical vision; (b) a shared values-based vision; (c) a shared vision of pedagogical bluff (i.e. ‘make believe’). The second theme is (2) strengthening school collective efficacy: (a) facilitating a collaborative instructional culture; (b) adjusting school reality toward instructional focus.

Communicating a shared vision

Integrating new pedagogical requirements into school practices, principals strategically communicated a shared vision in order to gain their teachers’ support and successfully implement the reform. Creating a common vision ultimately transforms individual ideas of school members into shared pedagogical practices. A common vision gathers school staff for a combined effort, enhancing commitment to school goals (Yukl, 2013). Fourteen of the study participants framed reform messages as leverage for a shared pedagogical vision.

A shared pedagogical vision

The Meaningful Learning reform was defined as a learning process which promotes six main functions (cognitive, metacognitive, interpersonal, intrapersonal, SRL learning and sensory-movement) crucial for students’ success in the 21st century (State Comptroller and Ombudsman of Israel, 2018). According to the report, the Israeli Ministry of Education has failed to implement properly its Meaningful Learning reform. Intended to make studies more relevant to students and shift the focus away from grades, the reform, was launched without proper planning, teacher training or attention to the results of similar reforms around the world. The ‘learner’s functions’ was a basic term offered as a central ideological anchor for the implementation of the meaningful learning process within schools. However, there was no shared language of the term in the Israeli Ministry of Education, which caused additional tension and confusion (Grice, 2019). Reducing their teachers’ uncertainty and clarifying incoherencies regarding the pedagogical change, principals made sense of the reform’s general term through framing activities and communication mechanisms.

Using innovation and creative ways of teaching, Lea, (principal, 15-year experience) focused on providing ‘a 21st century education’:

Meaningful Learning is a great option to lead pedagogical change. Making a reform work requires communication … My teachers were confused, so I thought to clarify a shared pedagogical vision. I said: ‘what our school needs now is a 21st century education, to prepare our students for their working life. We must be innovative and creative, spark their interest – but remain faithful to the matriculation exams’ material. Having much autonomy, we can encourage our students’ broader interests’.

Lea influenced her teachers’ sense-making process communicating both old (matriculation exams) and new (21st century skills) pedagogical practices, thus gaining her teachers’ support for the generally-outlined pedagogical reform. Jacob (principal, 5-year experience) has interpreted the reform as a pedagogy of freedom:
When I hear the words Meaningful Learning, I remember enjoyable experiences through my military service, university studies, meetings with other school principals abroad, and my volunteer work. I believe in allowing teachers pedagogical freedom . . . The reform is an opportunity to create an enjoyable learning environment . . . When my teachers said, ‘we want our independent voice to be heard’, I said, ‘You have full autonomy to do your unique bests’.

Emma (principal, 11-year experience) understood that altering teachers’ pedagogical practices (Sullanmaa et al., 2019), entails disagreements and resistance. She communicated the metaphor of ‘a ladder to the future’:

... the tradition of frontal teaching MUST be modified. Since I learned by experience that reform implementation is not easy to handle, I used the phrase ‘a ladder to the future’ to market Meaningful Learning to my teachers: ‘We were provided with space to put up and climb this new ladder – our creative pedagogical ideas. Preparing our future citizens for future challenges means climbing this ladder step by step. I believe that if we ENVISION it, it will come true!’

Emma connected reform demands with her shared pedagogical vision. Yet, reform implementation succeeded only partly, as some of her teachers did not perceive the generally-outlined pedagogical reform as a meaningful opportunity.

By contrast, Oliver (principal, 4-year experience) framed the new policy as ‘a modern facelift’. Failing to understand how to ‘reconcile’ the principles of accountability and those of 21st century learning, Oliver relied on his prior experience with over-used reform slogans:

Which slogan does the Ministry of Education use to have a modern school facelift this time? Being a Math teacher with strong scientific background, I find it hard to interpret the ambiguous term Meaningful Learning. Which direction should we follow – Learning or Meaning? They tend to offer a buzzword, like ‘21st century skills’, and turn it into a cliché. Practicing different questions for Math matriculation exams with my students, I know how to create measurable goals. However, when you use false rhetoric, such as Meaningful Learning, what are you going to measure at the end of the day? As I see it, this label has troubling implications . . .

Indeed, the State Comptroller report states that the goals of the Meaningful Learning reform lacked focus and clarity regarding the reform’s intent and implementation. Thus, its basic terms were translated into four pedagogical languages by the different units of the Israeli Ministry of Education (State Comptroller and Ombudsman of Israel, 2018). Contrary to Oliver, who failed to enact the pedagogical reform in his school, Mia (principal, 2-year experience) succeeded in shaping a shared vision through a bridging strategy, guided by a professional expert:

How can I communicate the reform to my teachers without measurable tools? Meaningful Learning is a vague term that teachers can interpret differently. For 2 months, I sat with the educational staff, and eventually brought a professional expert to our weekly meetings, to form a shared sense and create our vision of this unreasonable pedagogical burden.

Both Oliver and Mia repeated the word ‘measurable’ describing the challenges of the policy’s confusing basic terms, that had an undermining effect on attempts at productive responses to the reform. However, Mia’s response to the reform demonstrates that the quality of the pedagogical change depends largely on the initiative, creativity, creation of
a shared vision, resources and tools the educational leader manages to recruit (State Comptroller and Ombudsman of Israel, 2018).

**A shared values-based vision**

Principals shaped a shared sense-making process through communication mechanisms and framing activities, presenting the generally-outlined pedagogical reform as a springboard to fostering a collective values-based vision. Seven of the study participants shared this view. According to the reform, the learning process comprises three basic principles: ‘Relevance to the learner and the teacher, involvement of the learner and the teacher, and the value of it for the learner and the society’ (Weisblay & Wininger, 2015, p. 61). The last principle, emphasizes a cultural approach in which schools are called to minimize their focus on measurement, and raise their students to become adults with a sense of value and meaning. Nevertheless, the reform’s basic concept lacks clarity regarding its goals and the ways to implement it in schools. To prevent this frustrating obscurity from delaying reform implementation, principals used a collective-action frame to attend to their local contexts in order to mobilize teachers toward reform. Miriam (Ulpana [a girls-only Jewish high school] principal, with 5-year experience) related:

> Core values was a great platform to reduce teachers' confusion regarding the new pedagogical practices. ‘Selling’ this new way of teaching, broadening and deepening, I told them: ‘I am a principal because I believe in implementing values in education. They asked: ‘how can we connect values to our teaching in the classroom?’ I immediately recalled my Junior-High English teacher, who taught us about harmony through the song ‘Ebony and Ivory’. It gave my teachers confidence in the reform.

The framing of the new internal school evaluation accounting for 30% the curriculum as a leverage for advancing a shared values-based vision, served as a mechanism to bridge shared sense-making to gain the educators’ support. Recalling a meaningful former experience that shaped his perception as a ‘holistic educator’, Noah (principal, 10-year experience) talked about nurturing students’ hearts and minds:

> Moving forward with my staff means developing an open communication channel. I told them about my experience as a coordinator in a youth movement, which shaped who I am today: ‘from my holistic perspective, Meaningful Learning is a valuable journey which nurtures our students’ minds and hearts’. Some teachers resisted, others were overwhelmed, but the majority took part in our new practice.

Noah’s emotionally manipulative urging (Berkovich & Eyal, 2017), communicating a shared sense of the reform through a holistic framework nurturing student wellness, was only partially successful, as teachers did not perceive the new pedagogical practices as meaningful. Contrary to Noah, Ella’s [a principal with 22 years of experience] communication mechanisms did not support the reform:

> Education reforms, just like thunderstorms, are inevitable. This manmade ‘disaster’ confused my teachers and created a tragic situation. We became a sailing ship suddenly submitted to this thunderstorm that came out of nowhere, and, without warning told to change course ... no time to prepare ... Honestly, I do not see the value in a reform that is not implemented gradually. I told the teachers: ‘our hands are tied because the Ministry decides WHAT we teach! Our autonomy is measured only in terms of WHEN and HOW our students will be tested’.
The demand for immediate rather than gradual reform implementation, and the resentment of external pressure influenced Ella’s sense-making process.

A shared vision of pedagogical bluff

The generally-outlined pedagogical reform’s ambitious vision emphasized an overreaching goal of a major pedagogic change by reducing the number of external matriculation tests and making school seem more relevant to students by enabling alternative types of learning and assessment. The curriculum was divided into 70% of regular material assessed by national-level exams and 30% depth studies assessed by written assignments or group projects. School principals saw this 70/30 division as a ‘pedagogical bluff’. Drawing on the wider Israeli discourse, Mike (principal, 6-year experience) explains: ‘This is a double message which confuses principals, teachers and students and plays with our sense of reality’. The discrepancy between the declarative level and the operational level constrained productive responses to the reform. The numerical alteration in the final assessment seemed like a technical change rather than a significant conceptual one. Similarly, Ethan (principal, 15-year experience) relates to the ‘declarative culture’ characterized by declarations and inner inconsistencies, as ‘make believe’: ‘As long as the matriculation exam is a central goal, it is impossible to promote meaningful learning. Everything is make-believe. They say one thing and do another’.

Addressing their concern about the vague language in which the Meaningful Learning reform was constructed (Wei, 2017), principals argue that the generally-outlined pedagogical reform suggests innovation that might sound good in theory but has no effect on their school vision in practice. ‘What is the meaningful change?’ asks Lily (principal, 18-year experience), making sense of and framing the reform as a pedagogical outcome rather than a long-term process:

Building escape rooms, creating a model of Noah’s ark and running a school newspaper are good ways to try out new pedagogical practices. However, this temporary innovation does not even lead my teachers to work collaboratively and reflectively with their peers.

Daniel, (state religious high school principal, 3-year experience) reacts similarly, wondering, ‘does Israel move up or down a grade?’ and expands: ‘Meaningful Learning is a mixed blessing. It is shameful that you want to be creative but you lose the work of learning. Reform has led to superficial outcomes’. The National Authority for Evaluation and Measurement in Education (National Authority for Evaluation and Measurement in Education [RAMA], 2018) found the reform particularly unsuccessful, failing to bring about significant change by applying new forms of alternative learning.

Can a bird fly before its feathers have grown? Policymakers have cancelled matriculation exams in the 10th grade to enable deeper learning in class, and cast everything to the end of the 11th 12th grades. My teachers and I are in this fatal crash and we cannot deal with the damage!

Grace’s metaphor (principal, 14-year experience), her framing activity, negates the sense of having great autonomy in designing assessment methods for students, other than exams. In this regard, one of the central reasons for the failure of pedagogical reforms in the world is that no conscious and deliberate attention is allotted to the planning and implementation of the assimilation process (Zohar, 2013).
To summarize, through communication mechanisms, bridging strategies and framing activities, school principals shaped a shared sense-making process of policy messages. Some principals framed reform demands as leverage for a shared pedagogical vision, while others presented them as a basis for a values-based vision. Some others, drawing on the larger Israeli context and using framing activities, emphasized that the new division of 70/30 tended toward a pedagogical bluff. In other words, principals influenced their teachers’ sense of the generally-outlined pedagogical reform as either a bridge or a barrier to new pedagogical and values-based school practices.

**Strengthening school collective efficacy**

Facilitating a collaborative instructional culture while adjusting school reality toward instructional focus through communication mechanisms and gatekeeping strategies, principals strengthened the collective efficacy beliefs of their educational staff. Sixteen of the study participants employed gatekeeping strategies to shape their teachers’ sense-making process in order to mobilize them toward pedagogical reform implementation.

**Facilitating a collaborative instructional culture**

Through buffering strategies, school principals prioritized instructional time to allow teachers to work collaboratively. Receiving autonomy in teaching and student assessment for 30% of the curriculum, schools were expected to create innovative methods of teaching and evaluation on a short notice, since the reform implementation was not meant to be gradual. Asher (principal, 7-year experience) centered on creating instructional opportunities for relationship building among staff:

> No factory or business can generate innovation in two weekly hours … Meaningful Learning is all about bonding people together and creating a sense of trust. I decided to bring student teachers to classes, so we would have more time for our weekly meetings to think about innovative evaluation. Through those shared experiences and respectful relationships, I continued to reinforce a close, collaborative culture.

Goddard et al. (2015) assert that strong instructional leadership influences collective efficacy through increasing opportunities for teacher collaboration around instructional improvement. Similarly, Audrey (principal, 18-year experience) also used a buffering strategy, devoting more time through shared opportunities to question traditional beliefs on teaching:

> My guiding belief is that the influence of the principal is critical for a significant change. I constantly encourage my teachers to question their beliefs. Through a new school gathering, ‘our cup of tea’, teachers had to ask themselves ‘what is new in our lessons this year?’ Presenting Meaningful Learning as a shared opportunity to rethink our traditional teaching practices gave rise to a new instructional culture.

Audrey allocated time for communicating Meaningful Learning reform as an opportunity to question traditional beliefs to improve teaching practices. By contrast, Aaron (principal, 10-year experience) used communication mechanisms to question a new path with his teachers:
'We have a great opportunity to think outside OUR familiar box! We can either embrace uncertainty and come up with better achievements for our students or fight it and do our same old thing. Creating a culture of ‘unfamiliar innovation’ means urging ourselves to dare, imagine and not be afraid of making meaningful mistakes’. That was my message.

Unlike Aaron, Robert (principal, 4-year experience) did not support reform enactment while communicating Meaningful Learning reform through the image of a monotonous factory routine:

Unfortunately, like Courage to Change [the former reform], Meaningful Learning has not changed our monotonous factory routine. Failing to understand reforms’ rationale, teachers work systematically, similarly to workers in a factory. They do not reflect on their traditional practices, but rather keep working in a predictable routine.

Minimizing their teachers’ emotional distress about implementing the pedagogical change through buffering strategies, principals focused on leading by example and building trust. Trust in the school leader as an enabler of change is viewed as a cornerstone of school success (Berkovich, 2018). Adams and Forsyth (2009) found that trust in schools has a larger direct effect on collective teacher efficacy. Alexander (principal, 5-year experience) believes that through modeling collaboration skills he would build trust among staff and best facilitate reform implantation:

I said: ‘We can make a difference! Together we can help our students learn better’. I brought an innovative yearly workshop and learned side-by-side with my teachers. Creating school collective efficacy is a mirror. Whatever you do with your teachers will set the tone for what they will do with their students.

Meaningful Learning required schools to create new instructional opportunities. Alexander led by example, participating in professional development sessions with his educational staff. Facilitating pedagogical reform implementation depends on a collaborative school culture that fosters mutual trust (Tichnor-Wagner et al., 2016). (Sharing virtual space, Max (principal, 5-year experience) engaged and paired his teachers in collaborative instructional initiatives to nurture an instructional culture:

I created a school WhatsApp group and uploaded photos of teachers’ new practices on a weekly basis, for example, escape rooms in psychology and civics lessons and running games before math and sports lesson. Turning to their colleagues for advice has promoted my teachers’ efficacy. This proved a great way to pair teachers, get them believe in themselves and maximize our collective instructional potential.

Promoting an understanding regarding the empowerment of their school culture through a shared stakeholders’ instructional effort, Max exercised his influence as a central figure in the school, increasing his teachers’ collective efficacy (Berebitsky & Salloum, 2017).

Adjusting school reality toward instructional focus
Depending on their teachers to gain support for reform, principals adjusted their schools toward instructional focus. Using bridging strategies while developing teacher leaders, principals empowered their teachers’ and promoted their professional development and efficacy (Nets, 2017). Kate (principal, 2-year experience) translated reform demands into instructional practices through teacher leaders:
Making reform happen means building teacher leaders. Based on former experiences I had with reforms, I needed a pedagogical coordinator to make practices happen. The history coordinator took reform vague guidelines and turned it into homemade delicacies with her staff. She attended a professional development workshop to enhance her instructional abilities and strengthen her leadership. Now she is our learning mentor to the subject coordinators.

Principals like Kate engage in instructional leadership practices while developing the expertise of teacher leaders toward better school performance (Stronge et al., 2008). Research has illuminated the links between instructional leadership practices and collective efficacy (Goddard et al., 2015). Daniela (principal, 19-year experience) employed bridging strategies while engaging her pedagogical coordinator in order to protect school instructional time:

I believe in enabling instructional leadership practices, so I talked with the pedagogical coordinator about leading a shared learning initiative. We decided to devote the school professional weekly meetings to a collaborative learning structure. Coming up with a new program for assessment in writing across the different subjects, teachers observed each other’s practices and learned from one another.

Lisa (principal, 25-year-s experience) enacted buffering strategies while generating a shared technological school reality and focusing her teachers on creating a safe space for innovation in daily instructional practices. She took instructional focus a step further, encouraging depth at the expense of breadth (Alexander, 2015). Dividing the school day into longer time blocks, she allowed her teachers more time for new instructional methods: ‘I sat with my teachers and explained: “Now we have more time because I canceled several breaks, so we could have a double lesson to implement group work as a new teaching method, and improve our performance”’. Oscar (principal, 22-year-s experience) also employed buffering strategies. However, he has not facilitated collaborative learning meetings with his educational staff but rather let the subject coordinators struggle with meaningful learning practices on their own: ‘Unfortunately, I have little to do with reform in terms of instructional practices. I cannot find the time to learn with the teachers, so the subject coordinators have to work with their superintendents about the internal assessment’. From Oscar’s viewpoint, prioritizing instructional time with his teachers was not critical for reform implementation. Thus, developing shared leadership and collaborative instructional practices were absent in his school.

Through communication mechanisms, principals focused on creating a supportive physical environment. Lydia (principal, 3-year experience) communicated her instructional approach: ‘How can our students sit in rows? A different learning calls for a different classroom design’. Carrying out shared projects, teachers of different subjects divided students into small groups and sat at round tables’. Shaping a shared sense of an instructional classroom design, Lydia gained her teachers’ support for the generally-outlined pedagogical reform. However, not all principals believed in shifting from traditional school practices to instructional classroom arrangements. Framing the reform in terms of a technical barrier, Caroline (principal, 1-year experience) talked about teachers’ difficulties while failing to enact reform demands:

My teachers are still grappling with the demands of the previous reform. Not having appropriate workspace, they do not know what to do with the individual teaching hours.
So how can they carry out projects and make learning more meaningful with 40 students in a class? They are frustrated.

Comparing the current reform with the former policy and stressing the technical aspect rather than developing an instructional opportunity, Caroline’s sense-making of both reforms decreased her teachers’ sense of efficacy and their beliefs that they can master effective instructional skills given the technical barriers.

In sum, principals made sense of the generally-outlined pedagogical reform through their professional identity as instructional leaders. Strengthening the collective efficacy beliefs of their teachers while promoting a collaborative instructional culture and adjusting school reality toward instructional focus, some principals have used communication mechanisms and gatekeeping strategies. Other principals shaped a superficial sense of reform demands and used a framing activity to present new pedagogical guidelines as technical barriers.

Discussion

Our qualitative analysis of principals’ interviews indicates that the participants perceived and enacted shared sense-making practices relating to two major themes and sub-themes, implying both positive and negative responses to reform enactment in their schools. The first theme was communicating a shared vision. Principals framed reform demands as a platform for a shared pedagogical and values-based vision with their teachers to gain their support for reform. Some, however, framed reform messages as a shared vision of ‘pedagogical bluff’. The second theme was strengthening school collective efficacy: facilitating a collaborative instructional culture and adjusting school reality toward instructional focus through communication mechanisms. Using gatekeeping strategies, principals strengthened the collective efficacy beliefs of their educational staff. Findings show that principals’ perceptions and enactments overlapped and could be sorted into more than one theme. Specific first category sub-themes, such as how school principals communicated shared values-based pedagogical vision, share underlying meanings with the second category in the context of strategically increasing teachers’ collective efficacy beliefs.

The principals, focused on the inner school world, prioritized activities related to the quality of teaching and learning (Hallinger & Wang, 2015). As powerful actors affecting school effectiveness and leading a pedagogical change, principals made sense of the reform characteristics through their professional identity of instructional leaders (Sun & Leithwood, 2017). Shaping a shared sense of the reform, most principals focused on instructional leadership aspects, such as communicating a shared pedagogical and values-based vision. The notion of a shared vision is particularly relevant in the context of educational leadership, which has been shown to predict school outcomes. Leadership practices toward developing a shared vision help to inspire and motivate organizational members, giving them an overall sense of purpose.

Presenting the policy as a platform for a shared pedagogical and values-based vision, principals shaped how the generally-outlined pedagogical reform was perceived and enacted in their schools (Rigby et al., 2016). With the goal of persuading teachers to mobilize for reform, principals’ bridging strategy (e.g. providing a professional expert)
and communication mechanisms promoted and justified particular reform ideas. Because reform implementation entails the translation of new ideas into school practices, principals also engaged in framing activities, interpreting external demands as an opportunity to develop a common vision. Yet, not all principals supported the reform. Failing to reconcile accountability and 21st century learning, they framed school policy in a negative manner (e.g. ‘a modern facelift’).

Articulating a shared values-based vision through communication mechanisms and framing activities, principals made sense of the reform’s broad guidelines based on personal factors, such as professional experience, beliefs and values (Coburn et al., 2016). This process is concerned with how principals author their perception of a particular policy or mandate as well as enact it in practice. Thus, principals encountered difficulties in implementing the reform when their sense-making was anchored in prior-reform initiatives. The current reform was unusual in that it allowed school leaders to exercise considerable discretion regarding the ways by which to reach the broad policy goals (Israeli Ministry of Education, 2014a). Instead of making sense of the reform as instructional leaders, these principals expressed the feeling that they had not been granted autonomy to decide how to implement the reform. Using communication mechanisms, principals enacted the pedagogical reform in a superficial manner while relying on their previously constructed cognitive frames, which were largely grounded in former experiences with large-scale reforms.

Turning to the larger Israeli resistant discourse (e.g. The Secondary Teachers Organization and the media) has not allowed for a collaborative path, but rather produced an oppositional vision. Using framing activities regarding a shared vision of pedagogical bluff around the Ministry’s double message, temporary innovation and the lack of time and professional resources, principals did not formally engage with reform messages on their pedagogical level (Berkovich, 2011). Principals’ frames regarding the problematic nature of the reform (i.e. encouraging the attainment of 21st century pedagogical goals while stressing high-stakes testing) supported the Secondary Teachers Organization’s claim. Although viewed negatively while concerning themselves with organizational and resource allocation issues, teacher unions play an important role in understanding the influence of local actors who mediate policy at the school level (Bascia & Osmond, 2012). More specifically, teachers’ unions provide teachers with both individual and collective access to decision-making opportunities, which would not be possible through formal decision makers.

Promoting a collaborative instructional culture while engaging in buffering strategies and communication mechanisms, many participants protected their teachers from implementation pressure. Allowing their teachers more instructional time to work collaboratively and question teaching traditional beliefs, principals structured instructional opportunities to facilitate teachers’ work in ways that strengthened their organizational belief. Through buffering strategies, principals influenced their teachers while nurturing collaboration, leading by example and building trust (Versland & Erickson, 2017). Our findings show that principals acted as highly-effective instructional leaders, persuading their faculty members to use reform demands as a springboard to fostering a positive instructional climate, for example, by strengthening interpersonal relationships.

Employing bridging strategies, principals adjusted their schools toward instructional focus, promoting professional development. Using the expertise of teacher leaders,
principals developed organizational learning mechanisms, shared their instructional leadership strategically and engaged the pedagogical coordinators in collaborative interactions to improve school instructional performance (Goddard et al., 2015). Others negotiated between the external and internal environments through buffering strategies, adapting the generally-outlined pedagogical reform messages to suit their local instructional practices (e.g. generating a shared technological school reality by dividing the day into longer time blocks). Principals also communicated their instructional approach, focusing on creating a supportive physical environment. However, some framed the pedagogical reform in terms of ‘a technical barrier’ that decreased teachers’ sense of efficacy and beliefs that they can master effective instructional skills. Lack of physical space to collaborate or opportunity to see their colleagues as capable of generating change might lead to a decrease in teachers’ belief in their collective success (Berebitsky & Salloum, 2017). Understanding this challenge from a sense-making angle suggests that maintaining the resources for shared sense-making or even strengthening them during the processes of change, will enable people to cope with what they face (Weick & Sutcliffe, 2007). By contrast, if these resources are undermined or weakened during the change, people will lose sight of what they are trying to do and why. School principals and teachers thrown into an unclear reform program without the support required for their shared sense-making process, could not reduce the ambiguity and uncertainty in their work, and therefore failed to enact the reform.

Recent studies suggest that achieving school reform requires supportive school leadership and teacher community (Li, 2017). Pedagogical change needs teachers’ support as a necessary context, to improve teaching practices (Coburn & Woulfin, 2012). Namely, pedagogical reform typically involves significant cultural changes – in individual beliefs and practices, organizational values and norms, and implicit assumptions. Deep-seated beliefs and assumptions held by school practitioners often hinder reforms. Moreover, reforms that aim to change the school system rapidly and dramatically, seeking equal opportunities for all students, carry broad implications for teachers. Hence, they often evoke resistance. The generally-outlined pedagogical reform calls for pedagogical change, an internal school evaluation method, broadening and deepening, that has never existed in schoolwork prior to the reform. Managing resistance against the reform recognizes the interaction between the principal and the school community, and emphasizes the need to focus on both. This is in line with studies that have demonstrated how principals, together with their educational staff, constructed different meanings out of similar reform messages, based on their local contexts.

In the effective school, instructional leaders communicate a shared school vision within and around the school, to staff, students, parents, and the community (Hensley & Burmeister, 2009). Nevertheless, in this study, principals have not faced the out of school world. In particular, neither principals’ instructional strategies, nor their gatekeeping strategies reach across the boundaries of their schools. We did not come across principals who perceived and consequently took on a more active boundary spanning role, that might link their school’s internal networks with external sources of information (Benoliel, 2017). Occupied with buffering their teachers from external demands, principals’ sense-making was more anchored to their serving as gatekeepers rather than as boundary spanners. In this regard, in the second year of reform implementation,
principals’ inside-school gatekeeping strategies and communication mechanisms have helped mitigate the potential of reform overload and teachers’ resistance.

**Limitations and future research**

This study provides new data regarding school principals’ perceptions and enactments of shared sense-making processes while implementing a generally-outlined pedagogical reform. The study is subject to several limitations. First, the participants and their responses relate to the specific Israeli educational context. Hence, in order to enable generalization of the findings and substantiate their international validity, we recommend conducting similar studies in various socio-cultural contexts elsewhere as well. Second, the interviews with the principals took place in the second academic year of reform implementation. Longitudinal research is needed to examine whether and how, while shaping a shared sense-making process of external reform demands, principals change their framing activities in time, from early reform phase throughout the implementation stage, since sense-making is a continuous and ongoing process (Maitlis & Christianson, 2014). Third, this research focused on principals’ verbal interpretations of their sense-making. Further research can explore gatekeeping strategies that principals employ while influencing others’ sense-making processes using other measures such as direct observations, to evaluate the ways principals shape their teachers’ sense-making process and enact shared practices in diverse school settings.

Fourth, we used maximal differentiation sampling (Creswell, 2014) to capture a wide range of perspectives and gain better insight into principals’ sense-making processes; however, in this study we could not differentiate between each principal’s framing activities and communication mechanisms, and the school context from which it emanated. Therefore, it would be advisable to explore the interconnections between principals’ framing activities and gatekeeping strategies and factors such as gender, seniority, school size, and districts. Moreover, our research has not focused closely on principals’ own histories. Future research could explore how their histories and experiences might shape school principals’ types of framing activities and gatekeeping strategies while navigating their schools through an external reform process. Finally, from a shared sense-making perspective, this study was limited to principals’ perceptions only. Thus, we report principals’ perceptions and enactments of shared sense-making processes, but not their interaction with the school staff. This structure does not explain the more expansive usage of sense-making as a group-based and network-focused framework (Weick & Sutcliffe, 2007). Therefore, a co-developmental sense-making process requires exploring superintendents’, policymakers’, and school-teachers’ perceptions as well. Based on this study, we suggest exploring whether, how and under what conditions principals, as boundary spanners, could cultivate partnerships and collaborations as a platform for pedagogical entrepreneurship, particularly at times of external policy demands.

**Implications**

A generally-outlined pedagogical reform implementation can be enabled and constrained by shared sense-making processes. While implementing generally-outlined pedagogical reforms, school principals and teachers make sense of reform messages to
negotiate between internal and external school environments (OECD, 2016a), which in turn affect the extent to which educators alter their pedagogical practices. Therefore, the district should invest time up front, communicating and working with principals and teachers to help them attain deeper understanding of reform demands at organizational and local levels. Nurturing a long-term shared sense-making process is an essential part of any pedagogical reform implementation. According to this approach, policymakers, superintendents, teacher unions, principals and teachers become the collective drivers of a long-term instructional improvement. Thus, fostering a shared sense-making process requires a district-level focus on professional development and school capacity building.

Understanding how reforms are mediated, enacted, interpreted, and negotiated within schools (März et al., 2016) requires adopting a circulating bottom-up and top-down implementation strategy, which is determined by continuous and complex interaction process between state stakeholders (e.g. school districts), implementing agents (e.g. local stakeholders), as well as the organizational and local context. This process may not just leave space for sense-making processes but can also urge all stakeholders involved in the reform to work collaboratively while experimenting on how this is going to affect their school context. In this sense, principals need to weave the social sense-making network for discussions among staff members, which enhances joint negotiations of meaning (Pietarinen et al., 2017).

There is a need to create professional communities aimed at instructional improvement among local agents of change as a means of effectively implementing generally-outlined pedagogical reforms. In this way, using instructional dialogs, principals and teachers learn from one another and develop new knowledge necessary for translating reform demands into local practices. Recent studies demonstrate that professional communities make a unique contribution to teachers’ instructional practice (Louis et al., 2010); to which principal leadership contributes. This finding is consistent with previous research testifying that professional community is related to instructional improvement and is correlated with teachers’ adoption of new pedagogical practices (Smylie & Wenzel, 2003). ‘When the focus of the teachers’ conversations is on the quality of student learning … teachers adopt pedagogical practices that enhance students’ learning opportunities’ (Wahlstrom & Louis, 2008, p. 463). Participating in professional development and learning side-by-side with teachers, principals demonstrate the importance of everyone’s role in the instructional initiative, thus increasing the school’s collective efficacy (Versland & Erickson, 2017).

Promoting ownership over the reform through a shared understanding of the instructional change and collaborative opportunities with the faculty members, principals used gatekeeping and framing activities to attend to their social contexts while implementing the reform. School principals and their colleagues could benefit from collaborating in a wide professional community to share challenging aspects of reform efforts, while working together in developing strategies to enact new policies (Woulin et al., 2016). Providing guiding questions will prompt a fruitful dialogue: How does bridging or buffering either help or hinder school principals in shaping a shared sense-making process of pedagogical reform demands? Which gatekeeping strategies are more useful when working with teachers to shift their practices toward an instructional focus? What other strategies do principals use to meet accountability requirements while implementing new pedagogical demands? What is the effect of these strategies in leading instructional school practices? (Rigby et al., 2018). Addressing these questions extends and
expands school principals’ understanding of their instructional role within the implementation of generally-outlined pedagogical reforms.

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**References**


**Appendix**

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