

EDITORIAL

The quality of educational decision making greatly influences the extent to which schools succeed in developing the talents of all students, in being agile and responsive to change, and in providing a supportive climate for students and teachers. Teachers' decisions profoundly affect students' lives, as they weigh important matters such as retention, promotion, grouping, and tracking. Inequalities in education are predominantly related to decision bias, such as stereotyping or self-fulfilling prophecies. The decisions of school leaders have a tremendous impact on learning, development, and well-being in schools. Although decision making is at the heart of issues of school effectiveness, improvement, and equity, our insight into how educators make decisions in practice is still limited (Earl & Katz, 2006; Harteis et al., 2008). The key aim of this special issue is to broaden our understanding of decision making in education by investigating and discussing different perspectives.

For a long while in education, researchers and practitioners had great trust in teachers' intuitive judgment derived from experience within the teaching profession (Elbaz, 1993; Verloop et al., 2001). During the past decade, the trustworthiness of teachers' intuitive judgment has been questioned. Studies have showed a lack of validity and reliability when the accuracy of teacher judgment was compared with objective measures such as standardized tests (Brookhart, 2001, 2011). Mostly, these studies showed that intuitive teacher judgment disadvantaged low achievers, students with special educational needs, and those from lower social classes (e.g., Brookhart, 2011). This has led to a counter movement with the expectation that decisions would become more standardized and data driven (Mandinach et al., 2008; Schildkamp & Lai, 2013). The initial body of data use research mainly conceptualized data as quantitative indicators of students' cognitive output (Hubbard et al., 2014). More recently, scholars have critiqued this narrow view because it inhibits a full understanding of student competences and has led to undesirable practices (Brown, 2017; Ehren & Swanborn, 2012).

Even more recently, researchers have broadened their view on data and data use. Schildkamp (2019) discussed both formal data (collected deliberately and systematically) and informal data (collected on the fly). Data-based decision making has evolved to data-informed decision making—decisions do not have to be based on data; they should be informed by data. Or, as Earl

(2012) put it: data do not provide answers, they provide tools for thinking. Models of research-informed practices have described how research can be used to improve teaching practices and student outcomes, ultimately leading to improvement at the system level (Brown, 2017). In this special issue, the article by Groß Ophoff and Egger reflects on Educational Research Literacy (ERL) as the ability to access, comprehend, and reflect scientific information as well as to apply the resulting conclusions to problems with respect to educational decisions. The article discusses how crucial the engagement with research is for the process of data-based decision making. This coincides with the idea that both data and research are important for evidence-informed school improvement (Brown et al., 2017).

The rise of data, big data, and data use has also raised new questions related to data ethics. Responsible data use has emerged in education as an important concept. In their article within this journal, Mandinach and Jimerson couple data literacy with an ethical approach to using data—to be an ethical data user means using the right data in the right ways for the right purposes.

In their study, Gutwirth, Goffin, and Vanhoof investigate how Flemish middle school mathematics teachers make sense of school performance feedback data from external standardized tests. They show that the availability of school performance feedback data does not spontaneously spark sensemaking, nor does it necessarily lead to improvements in instructional practice. It appears that teachers' sensemaking of school performance feedback data is a largely intuitive process, grounded in external attributions and often lacking triangulation.

In education, judgment is mostly studied either from a data use or a teacher (tacit) knowledge perspective. However, in the broader field of decision making, recent theories on dual-process approaches indicate that both data-driven and intuitive processes are important for human judgment, and that both have merits and pitfalls (Hogarth, 2014; Klein, 2008). Professional decision making implies a combination of evidence (data and research) and intuitive expertise (Vanlommel, 2018, 2021; Vanlommel et al., 2017). In this special issue, the article by Vanlommel and Pepermans reports on the validation of a Teacher Decision-Making Inventory that combines both data-driven and intuitive dimensions in the different steps of the decision process.

An interesting message is conveyed in the article by Van Gasse and Mol, who explore how teachers use data for student guidance decisions at team meetings. Their qualitative analysis shows that data was only used sporadically, often not in a systematic way, and the depth of inquiry in formulating diagnoses on poor student functioning was low. This clearly implies the need to raise awareness and perhaps to provide adequate training to teachers involved.

Given our view that professional decision making requires a combination of data, research, and intuitive expertise, we also need to broaden the concept of data literacy. Judgment literacy would be more appropriate, describing the competences (knowledge, skills, and attitudes) to collect, combine, and weigh data, research, and intuition to reach informed decisions. In this special issue, Fjørtoft and Morud discuss a specific competence: the ability to make sound judgments about student learning processes, performances, and practical skills. They study assessment decision making in teaching as being highly complex, as teachers are faced with dilemmas such as tensions between different sets of goals (i.e., curriculum, business standards, and student goals) or between tacit and explicit dimensions of learning.

In her article on data-informed decision-making approaches to inform school improvement processes, Fernandes makes the effort to understand the “how” and the “why” of data-informed decision-making systems and their use in practice in the independent sector of Australian schooling. Fernandes concludes with recommendations for improved system capabilities and shows the important role school leaders play in the development of data-informed collaborative school cultures.

Overall, this special issue offers insights on broader competences needed for professional decision making and discusses findings with a dual-process starting point integrating data and intuition. In this special issue, you can find research that starts from student data and articles with a focus on professional capital related to decision making. We believe this broad view on decision making in education offers interesting and inspiring reading for a broad professional community.

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