Indeterminacy, disruption, and (more) intelligent approaches to classroom language assessment: Learning from the COVID-19 pandemic

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As the COVID-19 pandemic brought nearly all public activities to a halt in 2020, the disruptions to education were as significant as in any domain (Ali et al., 2020). The months that followed – and in some cases much longer was required before there was a return to any kind of normalcy – challenged teachers to identify, adapt, and create practices that could enable them to continue to make progress toward learning goals and, equally important, to maintain contact with students during a period of uncertainty and emotional distress (e.g., Cooper et al., 2021; Maaoui et al., 2023). While pressures also mounted on language testing professionals to determine how high-stakes assessments might continue (see Clark et al., 2021; Muhammad & Ockey, 2021), the adage that *necessity is the mother of invention* may be especially apt for characterizing the demands placed upon teachers during this time. Although many teachers certainly had relevant experiences and language assessment literacies to draw upon, for others the pandemic presented difficulties unlike anything they had previously encountered, such as an overnight shift to fully online learning, planning lessons for asynchronous delivery, and navigating so-called hybrid environments simultaneously involving both in-person and remote students. Moreover, technological affordances introduced to help teachers meet these challenges, such as Zoom and other videoconferencing platforms, were often previously unknown to teachers, required rapid learning of their functionality, and posed

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additional difficulties and concerns such as unreliable internet connections, student reluctance to turn on cameras, and new norms for participation. Amidst all this, pressures remained for teachers to conduct assessments for purposes ranging from assigning grades to monitoring student progress and determining achievement of curricular objectives. In some contexts, preparing students for external, large-scale standardized tests also continued to influence practices.

The aim of this special issue is to consider some of the second language (L2) classroom assessment practices, particularly those developed by teachers for formative purposes, that emerged during this truly unique period in time and that, rather than representing a temporary response to unusual circumstances, hold potential to become a part of our assessment landscape moving forward. Indeed, the unprecedented challenges brought by the pandemic created an urgency for rapid action, for effort to address immediate problems often by classroom teachers operating independently or with support from their colleagues but frequently in the absence of participation from language testing and assessment professionals. This situation closely resembles the epistemological and methodological framework for characterizing knowledge construction as a process of reflective action in response to uncertainty that is known as Pragmatism (Biesta, 2017). A tradition within American philosophy, Pragmatism emerged during the late Nineteenth Century as an alternative to the standard orientation to science. Biesta and Burbules (2003, p. 2) attempt to capture the contrast between these two philosophies of science as follows:

> If one assumes, for example, that knowledge can provide us with information about reality as it "really" is, and if one further assumes that there is only one reality, then one might conclude that there is eventually only one right way to act. If, on the other hand, one believes that the world of human action is created through action and interaction, and that knowledge is intimately connected with what people do, then new knowledge opens up new and unforeseen possibilities, rather than telling us the one and only possible way to act.

As we explain in the next section, Pragmatism has gained influence in the social sciences, legal studies, philosophy, and education, among other disciplines (Aikin & Talisse, 2017). A recurring theme in Pragmatist thought is the notion expressed by one of its most celebrated representatives, John Dewey, as a *transactional model of knowledge*.

According to this view, knowing is interconnected with experience, as living organisms interact with their environment, realize the consequences of those actions, and begin to act in more specialized, or intelligent, ways moving forward (Dewey, 1981a). Such a cycle of action in the face of uncertainty; reflecting on the outcomes of those actions; and reorienting to the future seems to be an especially apt framing of our discussion of assessment practices that developed during the pandemic and that may continue to have relevance in many contexts. Indeed, as we have argued elsewhere (Poehner & Inbar-Lourie, 2020), much research in our field reflects a standard model of science, generally referred to as Post-Positivism. Discussion of Post-Positivism as a philosophy of science is beyond the scope of the present paper, and we refer interested readers to Phillips and Burbules (2000) for an introduction and for commentary on its relevance to educational research. What is important for our purposes is that Post-Positivism developed from Enlightenment thought, and while it recognizes the fallibility and limitations of knowledge, it continues to promote familiar practices of hypothesis generation, controlled experiments, and acceptance of assertions that withstand efforts to falsify or disprove them. Application of knowledge to practice within Post-Positivism is valued but is not part of knowledge production itself; rather, the researcher's role is to produce knowledge claims that advance the field, but using this knowledge to address problems in the world is a separate undertaking (see Berlin, 2013). This standard model of first establishing a new approach or technology through research, piloting it in various contexts, and eventually 'scaling it up' has long dominated many professional fields, including education, where teachers and other practitioners are positioned as consumers of knowledge produced by researchers while also being charged with putting that knowledge into practice (Condliffe-Lagemann, 2000). As the reader will appreciate, this standard model is quite different from the process through which many innovations in classroom language assessment emerged during the pandemic.

To be clear, we are not suggesting that language teachers were explicitly influenced by Pragmatism as they sought ways to respond to the exigencies of COVID-19. Rather, our view is that the new practices that developed were frequently the result of teachers in particular settings doing their best to support and understand their students' language development and needs, and learning as they went along, that is, gaining experience and

refining their knowledge and practices accordingly. This aligns with a Pragmatist understanding of knowledge construction, which centers on actors, or practitioners, in the actual contexts in which they operate (rather than in controlled experimental settings) as they respond to immediate problems (rather than exploring interesting research questions or taking the next steps in a program of research). As an additional clarification, our intent is not to compare and contrast Pragmatism with Post-Positivism or with any other philosophy of science nor is it to promote Pragmatism as a preferred way for our field to proceed. On this note, Delanty and Strydom (2003), in their overview of major philosophies of science, include Pragmatism and Post-Positivism alongside *Interpretivism, Critical Theory,* and *post-Structuralism,* not to mention more recent developments that draw from one or more of these traditions, such as *feminisms, post-colonial theories, queer theory, Critical Race Theory,* and others. Like those authors, we see the prevalence of social science and educational research informed by each of these traditions as a potential strength, and we encourage language assessment researchers and practitioners to engage with them openly and consider what might be learned. At the same time, and for the reasons we have explained, we see Pragmatism as especially relevant to helping us understand new language assessment practices that have recently developed and for considering how they might contribute to the collective professional body of knowledge that researchers and practitioners may draw upon in our 'new normal' as well as when we inevitably confront new challenges in the future. To refer once more to Biesta and Burbules (2003, p. 13), "the ways in which the world can surprise us always provide input into the cycle of inquiry and action, forcing us to change our knowledge of the world and our ways of acting within it (which, in turn, can yield new experiences to learn from)."

The next section offers an overview of central tenets of Pragmatist philosophy, with particular attention to its extension to educational contexts through the writings of John Dewey. We then turn to exploring how these tenets may help us to better understand the assessment knowledge, skills, and principles (Davies, 2008) that were redefined by these unprecedented circumstances.

Pragmatism: Uncertainty, action, and the importance of experience

Menand (2002) traces the origins of Pragmatism to two pivotal events of the mid-Nineteenth Century: the ascent of Darwin's account of Natural Selection and its eventual overthrow of previous conceptualizations of diversity in the natural world and the American Civil War. Menand explains that for the generation of intellectuals coming of age at that time, both these events illustrated the shortcomings of ideologies and dogmas. In the realm of science, pre-Darwinian studies of species proceeded from an unquestioned commitment to religious teachings that held that all organisms existed in their current state because that is their idealized form, the form in which they were created by God. Consequently, much scientific inquiry had been stifled, preventing from investigating processes of change because such questions inevitably conflicted with prevailing religious dogma. The U.S. Civil War represented a failing of different sort, one in which an ideology of racial superiority and inferiority provided a justification for slavery and proved resistant to various social and political pressures, ultimately resulting in years of devastating violence. For young American intellectuals, the latter half of the Nineteenth Century was a context prime not only for questioning received knowledge but for a general skepticism toward any claims of immutable, universal knowledge, that is, any foundationalist epistemology. What arose in its place, at least among some philosophers, was not an effort to establish a new foundation for establishing the certainty of knowledge claims – after all, this could all too easily become a new dogma – but instead an embrace of the lack of certainty in the world and a recognition that action is still possible without assured outcomes. Moreover, this uncertainty demands a tolerance of multiple approaches or ways of thinking. Here Menand (2002, p. 431) discusses Pragmatism as a *marketplace of ideas,* which he traces to the legal writings of U.S. Supreme Court Justice Oliver Wendell Holmes, Jr.: "It [Pragmatism] makes the value of an idea not its correspondence to a preexisting reality or a metaphysical truth, but simply the difference it makes in the life of the group." Menand continues that this marketplace "is the metaphor of probabilistic thinking: the more arrows you shoot at the target, the better sense you will have of the bull's-eye" (ibid.). Permitting multiple ideas to be proposed and considered increases the likelihood that actions will lead to desired outcomes because a

diversity of perspectives is needed for the better, or what Pragmatists would like term the more *useful*, ideas to emerge.

Aikin and Talisse (2017) explain that the term 'pragmatism' is often attributed to C. S. Peirce, who in turn was influenced by Kant's idea of a *contingent belief*. Following Menand (2002), a contingent belief, which Peirce developed into *pragmatic belief,* can be understood through the example of a physician's diagnosis; the diagnosis is the essential starting point for action, typically some form of treatment. Depending upon the outcome of the treatment (i.e., if the patient improves or worsens or develops other symptoms) it is possible to determine the correctness of the diagnosis or whether a new diagnosis is needed. In this sense, the diagnosis is both the initiation of the treatment process and its conclusion. Moreover, certainty is determined at the end of the treatment, not at its beginning. Because action is required on the part of the physician, there is in essence a bet being placed, a bet concerning the appropriate way to proceed. Peirce, also referencing the writings of Alexander Bain, described a *pragmatic belief* as one on the basis of which we take action (Menand, 2002). Furthermore, Peirce argued that in reality, a pragmatic belief is the only kind of belief possible because the world is complex, dynamic, and therefore never fully knowable. For Peirce, whose interests included not only philosophy but also mathematics and in particular statistics and probability, all our beliefs are bets of what we think is most probable most of the time. Interestingly, Peirce also observed that as individuals our bets are likely to be less successful because our individual basis of knowledge and experience is necessarily limited, but as a community or society our bets should, in principle, have a broader base upon which to draw and therefore should be better.

Throughout the first half of the Twentieth Century, Dewey championed Pragmatism and further developed its principles as he brought it into the domain of education. Among the developments in educational research and practice with which Dewey is often credited are the lab school model, in which aspiring teachers may observe and assist in primary or secondary classrooms that are connected to a university and where educational researchers consult and collaborate, and the notion of teacher inquiry as an approach to ongoing professional learning. Inquiry builds upon the aforementioned model of

transaction to explain human knowledge and extends it to knowledge construction in contexts of teachers and schooling. Furthermore, inquiry for Dewey parallels the activity of scientific research, with the exception that the former tends to be individualized and may be less formal in its procedures while the latter involves both consulting with and reporting outcomes to a professional community and typically entails adherence to formal and specialized methods.

Inquiry begins with an act of perception, specifically with the identification of a question or problem, which Dewey referred to as an *indeterminate situation*. The situation is problematic in that it departs from what is otherwise anticipated, from our previous experience and therefore the range of situations that we can confidently respond to. It is this introduction of doubt combined with a need to act that initiates inquiry, that is the cycle of acting-knowing that seeks to change "unsettled situations into those more controlled and more significant" (Dewey 1981a, p. 236). To recall Peirce's discussion of a pragmatic belief, we need to place a bet regarding the course of action that we think most likely to yield a desired outcome. For Dewey (2008b), however, this is not a matter of trial-and-error but one mediated by thinking, a process of *intelligent action* that brings together knowledge, experience, and reflection *with* action.

At the start of inquiry, thinking intervenes to free us from trial-and-error or random action. Through thought, we engage in a different kind of action, which Dewey (2008a, 1981a) described as *conceptual operations* to distinguish them from subsequent *existential operations* or the actual transformation of a situation. Crucially, conceptual operations allow us to try out various possibilities, a process of planning and attempting to predict both desired and unintended consequences of each course of action. To be sure, the more closely the indeterminate situation resembles problems we have previously encountered, the greater confidence we have in developing plans and predictions. At the same time, and again in line with Peirce's observations, we do not need to function completely independently but can instead benefit vicariously from the experiences of others, whether by consulting immediate colleagues or a research literature. Essential to Dewey's understanding of reflection, however, is that these resources cannot prescribe our actions. As no two situations are identical, inquiry positions the practitioner as the

mediator between knowledge or experience derived from other contexts and the exigencies of the immediate problem and as the final arbiter for what action to take. The goal is *intelligent action.*

An important principle in Pragmatism is that knowledge cannot reveal 'what works' in a generalized, universal sense but rather 'what has worked' and 'why' (Biesta, 2007). As Biesta and Burbules (2003, p. 11) put it, "Educational research can only ever show us what has been possible in a specific situation – even if that situation was the specific situation of something called a 'representative sample' – but it can never tell us once and for all what to do." This is because the outcome of inquiry is a description of the relationship between actions that were taken and their consequences. Biesta (2013) explains that within Pragmatism such statements are referred to as *warranted assertions* rather than facts, underscoring their status as knowledge claims that are supported by certain warrants which are themselves connected to both particular contexts and particular purposes or values. Indeed, in Pragmatism the complexity of phenomena means that there is always some degree of uncertainty; we cannot assume that a given action will produce the same outcomes – and only those outcomes – every time (Biesta, 2013). Moreover, the desire for certain outcomes reflects our values, and these, too, need to be a focus for ongoing examination. As our values shift, the outcomes we prefer may lead to different responses to a familiar situation.

Of course, Dewey (1981b) is clear that intelligent action predicated upon careful consideration of our values and the available warranted assertions does not guarantee a successful outcome. In the case of inquiry, success may be understood as a reduction of our initial doubt concerning the indeterminate situation; we have, in short, determined a course of action and executed it and we are satisfied with the outcomes. When an indeterminate situation is not resolved by our action, the process begins again, only now our base of knowledge includes warranted assertions concerning our previous action and their consequences. Inquiry is thus iterative in nature, ideally leading each time to increasingly intelligent action.

We conclude this very abbreviated commentary on Pragmatism with the observation that for Dewey, inquiry was fundamentally a question for human rationality, that is, a way for

people to be rational and agentic but also responsible in terms of engaging both with what is possible and what is desirable. Viewed in this light, the value of knowledge resides in its usefulness. While conventional models of science emphasize how well knowledge claims mirror or capture a given reality, Pragmatism regards knowledge not as reality itself nor as a reflection of reality but rather as something we can use in the world. It is certainly the case that knowledge produced through scientific activity might later come to be used in the world, as often happens when new technologies are derived from scientific discoveries and are subsequently applied to real world problems. Such application, however, is not part of scientific inquiry itself. For Pragmatism, knowledge is not pursued for its own sake but in the service of responding to immediate questions and problems. Any knowledge we arrive at is, at its best, provisional and hopefully useful to our present concerns and goals. It also forms part of the base of available knowledge and experience that can be consulted in the future – again, not telling us what must be done but helping us consider what might be possible.

Pragmatic approaches to classroom language assessment during the pandemic

Interest in the use language educators make of their assessment expertise has increased meaningfully in the last decade due to acknowledgement of their essential role in assessment processes. Much of the research points to the need for specialized language-based assessment know-how as well as at the significance of both language-learning theories and pedagogy and context-based expertise (Gan & Lam, 2022; Levi & Inbar-Lourie, 2020). The synthesis of this knowledge, experience, and expertise that facilitates assessment-based decision-making is referred to as Language Assessment Literacy (LAL), a dynamic personalized and institutionally embedded construct (Inbar-Lourie, 2017; Xu & Brown, 2016). Though the precise definition of the components of the LAL entity is still under debate (see Kremmel & Harding, 2020), expertise in conducting formative on-going assessment to improve learning accompanied by relevant feedback is viewed as a vital LAL core factor, especially for language teachers.

At the start of the pandemic, language teachers certainly had varying degrees of knowledge and experience with formative classroom assessment practices, and this LAL would have served as the initial basis for how they responded to this *indeterminate situation*. What kinds of actions did they take as they endeavored to adapt their existing assessment practices or adopt new ones? Under what specific circumstances were new formative language assessment practices emerging? How well did these practices work (given their intended purpose)? Where were the challenges and problems for language teachers and learners? What was the process like through which teachers reflected on successes and setbacks and re-oriented their efforts as they attempted to act in increasingly *intelligent* ways? What new knowledge claims – *warranted assertions* perhaps rather than 'hard facts' – might have emerged for our profession to consider? These are among the questions that the papers in the special issue explore.

The five papers in the special issue document assessment innovations in the wake of the pandemic as reported by researchers in diverse settings in Canada, Finland, Germany, Japan, Norway, and Ukraine. Studies employ both quantitative and qualitative research methods to understand teacher and learner experiences during the pandemic, ways in which assessment practices shifted as online language teaching became normative in certain contexts, and how some innovations have regained relevance as new demands have been placed on education systems.

The realization that circumstances may again emerge that prompt a rapid shift to online learning and that our collective experiences of the pandemic can provide a valuable orientation to respond to such a situation is brought into sharp relief in the study by Kvasova and colleagues. The devastating Russian invasion of Ukraine and the ongoing war that has ensued has, the authors report, created far greater challenges for language teachers and learners than the pandemic. As Kvasova et al. explain, even conducting classes online cannot be assumed in Ukraine at the time of writing, and consequently formative language assessment practices must be optimally flexible, accessible to learners, and of high value. The authors examined the use of an online platform known as Book Creator for formative assessment purposes among university students preparing to be TEFL teachers. The wartime circumstances necessitated that the teacher training

occur online, and the major challenge faced by the curriculum designer was how to still support development of TEFL knowledge and teaching and assessing skills among the pre-service teachers. Kvasova et al. documented the use of Book Creator as a vehicle for the pre-service teachers to synthesize and showcase their learning in the course while also providing instructors the opportunity to assess their progress and make adjustments accordingly. In essence, the pre-service teachers' asynchronous work to independently create TEFL toolkits using Book Creator was a learning project that provided ongoing information about their learning to the instructors. Analysis of summative assessments of pre-service teacher learning at the end of the course enable the researchers to understand connections between the use of Book Creator and overall learning. A particularly important feature of the project was that by gaining familiarity with Book Creator, the students came to understand a resource that they, in turn, could use with language learners in their future practice, especially when faced with circumstances that require remote instruction.

For their part, Sawaki, Ishii, and Oi identify the increased demands for teacher feedback that accompanied the shift to online language teaching in Japan as learners no longer had regular in-person contact with their instructors or peers. The authors note that in some contexts a response to this new dynamic has been the rapid adoption of technology-mediated feedback practices. In an effort to understand this 'new normal', Sawaki and colleagues conducted a mixed-methods study of the use of a web-based formative assessment system known as W-Writing. The W-Writing system automatically generates feedback on student texts, thus reducing the demands on teachers. Following the system's implementation in an undergraduate academic English writing program at a Japanese university, the authors traced student writing progress according to rubric scores of texts they produced before and after receiving the automated feedback. Surveys of student experiences and qualitative interviews with instructors provide additional insights into their perceptions of the W-Writing system, the efficacy of the feedback it provides, and enduring questions and challenges related to the use of such technology in online language teaching environments.

In their paper, Mäkipää and Soltyska report results from their investigation into formative assessment practices among language teachers in Finland and Germany. Through online questionnaires and structured interviews, the authors sought to arrive at an understanding of the landscape of language classroom formative assessment practices that teachers employed during the pandemic, challenges they experienced and lessons they learned, and what this might mean for their approach to formative assessment moving forward. Mäkipää and Soltyska explain that teachers' responses to their new and uncertain situations reflected not only their language assessment literacy but were also mediated by issues such as familiarity with available technology and how to resolve technology-related difficulties as well as concerns over the trustworthiness of work submitted online by students. Among the recurring themes the authors report was the teachers' commitment to engaging students in both self- and peer-assessments of language learning and to providing timely, quality feedback. The challenges teachers experienced in pursuing these goals contributed to reshaping their perceived assessment literacy needs, an issue that is of import for both language teacher educators and language assessment specialists.

Vogt and Tsagari offer a powerful juxtaposition of language teachers' experiences in higher education through use of a qualitative, open-ended questionnaire and focus group interviewing at two points in time: 2021 during the height of the pandemic and then toward the end of 2023, when circumstances had settled into a new normal. In this way, Vogt and Tsagari were able to identify teachers' language assessment priorities, practices, and experiences while they were actively engaged in navigating challenges brought by the pandemic and then to compare these to their subsequent actions and reflections. An important theme emerging from this research concerns teacher agency and its relation to institutional policies. As the authors explain, some higher education institutions emphasized uses of online summative assessments, which left little room for teacher autonomy to explore other practices that might support curricular and learning goals. In contrast, other institutions permitted considerable flexibility to language teachers, frequently resulting in uses of peer- and self-assessment, open-ended written and speaking assessments, and project-based assessments, among other practices. The follow-up round of data collection shed light on the value of the latter type of context in

promoting both teacher agency and their continued professional development vis-à-vis language assessment literacy and assessment practices.

Reports on the impact of the pandemic on education in academic as well as popular media outlets frequently expressed particular concern over its effects on young learners as well as on the development of learner autonomy and self-regulated learning abilities. These topics are the focus of the paper by Ignacio and colleagues. Working with primary school learners in Canada through the BalanceAI digital assessment platform, a community outreach initiative of the University of Toronto, the authors examined writing development through participation in online writing tutoring sessions. The BalanceAI platform is aligned to the Ontario language curriculum and generates automated scores of student writing. Following their independent production of written texts, the learners engaged in tutoring where they were offered diagnostic feedback intended to scaffold both their writing development (e.g., organizing and developing ideas) and their capacity to reflect upon their work, evaluate it, and determine how it may be improved. Following learner responses to the scaffolded feedback across sessions afforded insights into developmental patterns and trajectories in both areas. As Ignacio et al. explain, more explicit focus on promoting self-regulated learning abilities in the language curriculum is valuable for all learners, especially those from disadvantaged backgrounds, and the potential for disruptions to education systems that the pandemic revealed render it all the more important moving forward.

Taken together, the papers in this special issue provide insights into a range of contexts, challenges, and responses to the pandemic. These include the experiences of language teachers in Europe (Kvasova et al.; Mäkipää & Soltyska), Canada (Ignacio et al.), and Japan (Sawaki et al.); those of teachers in primary school (Ignacio et al.), secondary school (Mäkipää & Soltyska), and higher education contexts (Vogt & Tsagari) as well as in the preparation of future language teachers (Kvasova et al.). The issues brought to attention include the importance of teacher agency in shaping formative assessment practices (Vogt & Tsagari), the imperative to provide quality feedback to learners (Ignacio et al.; Sawaki et al.), and the role that technology may play in helping meet these needs (Kvasova et al.; Sawaki et al.). With this in mind, we invite readers to consider how the

challenges of these indeterminate situations, the reflections of teachers on their experiences, and the innovations and intelligent actions reported may have ongoing relevance to how we, as a field conceptualize language classroom formative assessment and teacher language assessment literacy and how we might continue to develop our warranted assertions in the future.

Author disclosures

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