

Authors' Manuscript -- Prepublication manuscript.
International Journal of Educational Research 84 (2017)

Challenges in Understanding Different Epistemologies for Studying Learning:

A Telling Case of Constructing A New Research Agenda

Judith Green

Jenna Joo

Yun Dai

Tijana Hirsch

Monaliza Chian

University of California, Santa Barbara

Priscila Barros David

Federal University of Ceará, Brazil

In 1961, in their introduction to a seminal volume entitled *Language and Concepts in Education*, Philosophers of Education, B.O. Smith and Robert Ennis argued that time had come to reformulate fundamental concepts in Education, including learning (e.g., Roland, 1961; Aschner, 1961). In developing this special issue on *(Re)searching Learning Across Contexts: Methodological Considerations*, Kumpulainen and Erstad have provided a foundation for exploring how, today, a group of researchers are once again addressing this call by (re)formulating fundamental concepts to guide studies of learning within and across actors, times, events and substantive knowledge areas. To make visible this process, the editors have

invited authors to provide *telling cases*¹ (Mitchell, 1984) that make transparent how their particular (re)formulations of concepts lead to the development of a logic-of-inquiry for an empirical study.

What is unique about the group of researchers that these editors have assembled for this special issue of the *International Journal of Educational Research (IJER)* is that they have been part of ongoing dialogues with the editors, individually and collectively, over the past decade². These ongoing dialogues have explored the challenges of developing a *new research agenda* for studying learning and learning contexts in the complex and dynamic world of the 21st Century, a period that Sociologist Zygmunt Bauman (2000; 2004) called *liquid modernity*.

Furthermore, by including this commentary, Kumpulainen and Erstad created a basis for making visible challenges that readers may face in exploring the role of such ongoing dialogues in the process of (re)formulating a research agenda that challenges the “traditional definitions of learning and education” (p. xx). This commentary, therefore, is part of the dialogic process that these editors, individually and collectively, have been instrumental in promoting, by bringing researchers from different disciplines together to engage with the ontological (i.e., nature of reality) and epistemological (i.e., ways of knowing) perspectives of others, who are seeking new understandings of the complex process of creating a new research agenda.

¹ Anthropologist Clyde Mitchell (1984) argued that telling cases are “detailed presentation of ethnographic data relating to some sequence of events from which the analyst seeks to make some theoretical inference. The events themselves may relate to any level of social organization: a whole society, some section of a community, a family or an individual” (p. 238). Given the argument later in this article that the articles are artifacts of intellectual ecologies (Strike & Posner, 1992) in which the authors of the article are inscribing emic or insider perspectives, we viewed the articles in this special issue, and the special issue itself, as constituting telling cases. These telling cases provide a ground for tracing of the logic of inquiry and logic of reasoning that the different authors constructed. This first level of analysis provided a grounding for a contrastive analysis of the logics-of-inquiry inscribed in each, in order to identify what each contributed to the new research agenda framed by the editors.

² Examples of international volumes in which Kumpulainen and Erstad, along with different authors in this volume, have contributed include: Kumpulainen & Renshaw, 2007; César & Kumpulainen, 2009; Kumpulainen, Hmelo-Silver & César, 2012; Kaur, 2012; Erstad & Sefton-Green, 2012; Erstad, Kumpulainen, Mäkitalo, Schrøder, Pille Prүүлmann-Vengerfeldt, Jóhannsdóttir, 2016.

Specifically, they have created a space for exploring how differences among the authors in conceptual, disciplinary and methodological grounding can become resources, when contrasted, in order to uncover challenges in bringing such diverse logics-of-inquiry together to build a *common research agenda*, one that has the potential to challenge traditional definitions of learning contexts as well as what counts as learning and learners in particular contexts.

Thus, Kumpulainen and Erstad, by inviting the lead author of this commentary, a researcher, who had participated in these dialogues over the past decade (See Footnote 2), and inviting her to assemble a group of intergenerational and interdisciplinary scholars³ to write this commentary on this interdisciplinary and international set of articles, can be viewed as creating an opportunity for readers seeking to enter these ongoing dialogues to explore challenges involved in understanding the range of different (re)formulations as well as methodological directions undertaken by these authors. Viewed from this perspective, the challenge in reading this special issue of the IJER involves more than reading each article individually and adding the arguments together; rather, as our Interactional Ethnographic (IE) approach to reading across these articles will show, it required a conceptual approach to reading the volume as a whole in order to explore what this new research agenda might entail from the perspective of those contributing to its construction (Green, Castanheira, Skukauskaite & Hammond, 2015).

Our commentary team's goal of seeking the *emic* (the insider perspective) is grounded in our team's collective interest in researching common phenomena across disciplines, and in understanding the role of inter-transdisciplinary dialogues in (re)formulating fundamental

³ Members of the commentary team include second year and fifth year doctoral students, who have roots in different countries (e.g., China, Israel, South Korea, and the Philippines), a visiting scholar from Brazil and the team leader, who is a senior scholar in ethnographic research in education. While they are in a common doctoral program in education, they also have disciplinary roots in psychology, technology studies and share an interactional ethnographic approach to reading across disciplines (Green, Castanheira, Skukauskaite, and Hammond, 2015).

understandings of complex problems and educational processes (e.g., Green, Dai, Joo, Williams, Liu, & Lu, 2015). Our team's goal in taking this approach to reading ethnographically across these articles was three-fold. First, we sought to enter/(re)enter the ongoing dialogic community to develop an emic perspective of where this collective research agenda was at present. Second, as interactional ethnographers, we sought to make visible how taking an ethnographic perspective (Green & Bloome, 1997; Green, Skukauskaite & Baker, 2012; Bloome, in press) provided a basis for triangulating (e.g., Denzin, 1978; Corsaro, 1981; Patton, 2002) the ontological and epistemological arguments and processes across the articles to explore what each contributed to the development of the potential for a new research agenda. And third, by making transparent⁴ what an approach to reading this volume ethnographically involves, we make visible the challenges that we encountered in examining how, as well as what, each contributes to the new research agenda.

In this commentary, therefore, we sought to make visible how different forms of local knowledge (i.e., problem-solving or practice-based knowledge, including knowledge guiding logics-in-use) and encyclopaedic (i.e., scientific) knowledge and actions are necessary to (re)formulate the current research agenda⁵. As we will demonstrate, these goals involved an iterative, recursive, and non-linear abductive process (c.f., Agar, 2006; Green et al., 2012) in order to explore what each author or team of authors as well as the collective-as-a-whole enabled us to understand about learning in a liquid modern world, where new bodies of

⁴ For arguments about the need for transparency in reporting framed by professional organizations, see the Standards for Reporting Empirical Social Science Research and in Humanities-Oriented Research of the American Educational Research Association (AERA, 2006; 2009). These standards were designed to support access of readings to arguments across research perspectives, phenomena of interest as well as disciplinary groundings.

⁵ The distinction between encyclopaedic and problem-solving or practice based knowledge draws on arguments about inter-transdisciplinary knowledge construction framed by the td-net of the National Academy of Arts and Sciences (<http://www.transdisciplinarity.ch/e/Transdisciplinarity/>). We argue that these are two different, yet interdependent ways of knowing through this new research agenda.

knowledge, new learning demands, and new configurations of actors are being (re)constructed across times and spaces for learning, often in an on-going manner.

On Reading the “New”

Given the history among the authors of this special issue, our goal for this commentary was to add a level of transparency to the volume that is often invisible when readers assume that reading across disciplines is like reading their own discipline, given their shared knowledge with members of that discipline. Our approach to reading across disciplines and empirical studies ethnographically was designed to make visible the challenges of reading “the new”, for, as Philosopher of Language Richard Rorty argued, if what is new is truly new (i.e., this new research agenda), the challenge is not one of selecting which of these arguments was “correct” or “better”.⁶ Underlying this commentary, therefore, is an approach to understanding what is being proposed as the alternative to the traditional, and how, as well as what, the arguments proposed and the empirical studies presented provide as a foundation for this *new research agenda*.

The following argument from Rorty, in his book, *The Contingency of Language* (1989), provides a philosophical argument for understanding what is entailed in creating the “new”. He argued that (re)formulating or creating a new approach does not lead to a better language but rather requires the readers of the new language(s) to “try thinking of it [the phenomena of interest] this way”(p. 9); that is, in this volume, through the language(s) of the authors. Just

⁶ For a parallel argument for contrasting research perspectives on common classroom data, see Morine-Dershimer (1988 a; b), who argued that you need to use the differences to re-enter the archive and to explore further the records for the possibility exists that none of the perspectives alone capture the whole, or that the whole can be known through a contrastive approach. This argument captures the need to explore not only the limits to certainty of particular approaches but also what might be missing that these approaches do not make visible.

what this process entails is further elaborated by Rorty in the following argument about what is required by the philosophical method that he was proposing:

The method is to redescribe lots and lots of things in new ways, until you have created a pattern of linguistic behavior which will tempt the rising generation to adopt it, thereby causing them to look for appropriate new forms of nonlinguistic behavior, for example, the adoption of new scientific equipment or new social institutions (p. 9).

He further argued that:

This sort of philosophy does not work piece by piece, analyzing concept after concept, or testing thesis after thesis. Rather, it works holistically and pragmatically. It says things like "try thinking of it this way" -- or more specifically, "try to ignore the apparently futile traditional questions by substituting the following new and possibly interesting questions." It does not pretend to have better candidates for doing the same old thing which we did when we spoke in the old way. Rather it suggests that we might want to stop doing those things and do something else. But it does not argue for this suggestion on the basis of antecedent criteria common to the old and the new language games. For just insofar as the new language is really new, there will be no such criteria (p.9).

Given this argument, our commentary team understood that Kumpulainen and Erstad were not arguing for one particular perspective but rather that they were inviting readers into the dialogue among this group of authors, who were making visible to each other in a public space (and thus potentially to readers), their particular conceptual and methodological arguments on this common topic.

The challenge in reading these articles, therefore, is one of understanding what *collectively* these authors were arguing for, as they engaged in their particular processes of (re)formulating the study of the relationships among different learning contexts, learners and substantive areas of knowledge construction(s). Rorty's argument enabled our commentary team to understand that this special issue of the IJER was created as an opportunity to explore what the "new" languages created by the authors afford readers in understanding the need for, and ways of engaging in, a new research agenda.

The Articles As Artifacts Of Different Intellectual Ecologies

To initiate our logic-of-analysis that guided the ways our team sought to construct a collective, not individual, understanding of the goals of the editors for this special issue, we began with an analysis of the guidelines framed for the authors by Kumpulainen and Erstad. This angle of analysis, or beginning point, was predicated on the view of each article as written by members of particular *intellectual ecologies* (Strike & Posner, 1992). To support readers in gaining access to the arguments about the need for a new research agenda, Kumpulainen and Erstad (2016, p. xx) challenged the authors to make transparent their current "[e]fforts to understand the dynamic processes of learning situated across space and time, online and offline, [that] are presently challenging traditional definitions of learning and education" (p. xx). They conceptualize their challenge to the authors in the following:

Not only is this a pragmatic challenge, that is, how to trace learners across physical contexts, but also very much a methodological one. This entails how to conceptualize learning as stretching across multiple contexts and how this conceptualization informs

the logic of inquiry the researchers take up in order to make sense of their investigations (p. xx).

This call for reflexivity and transparency in reporting, as this commentary will show, is one that we also faced as readers. That is, in constructing the accounts of the research and conceptualization processes within and across articles, we were required to step back from our personal perspectives, or what Heath (1982; Green et al., 2012) called *stepping back from ethnocentrism*, in order to uncover the specific (re)formulations and methodological directions constructed by each author, or team of authors, in this interdisciplinary and international initiative. However, as our commentary team did not share the perspectives of each author, just what counted as transparency was often challenging to understand, given that the authors represented a range of different research languages and epistemological perspectives, many of which were unfamiliar to different members of the commentary team.

The challenges that we faced in reading across these conceptually diverse set of articles, therefore, led our team to construct an analysis of the proposed guidelines, which is presented in the following table (Table 1).

Table 1. Editors' Goals for Transparency in Reporting

| Goals | Actions for Authors Identified in Editor's Introduction |
|--------------|--|
| 1 | Address the pressing questions surrounding educational research on investigating learning across contexts: <ul style="list-style-type: none"> ● How to trace learners across physical contexts (pragmatic challenge) ● How to conceptualize learning as stretching across multiple contexts (methodological issue) ● How this conceptualization informs the logic of inquiry the researchers take up in order to make sense of their investigation (methodological issue) |
| 2 | Introduce a set of empirical studies that all focus on researching learning as complex phenomena stretching across: <ul style="list-style-type: none"> ● space ● time ● beyond the here and now |
| 3 | Introduce: <ul style="list-style-type: none"> ● The conceptual and methodological frameworks in defining a 'learning context' |

| | |
|---|--|
| | <ul style="list-style-type: none"> ● How this framing has guided their inquiries into analyzing learning across <ul style="list-style-type: none"> ○ children’s (lives) ○ young people’s (lives) |
| 4 | <p>Highlight the diversity of this field of research through multiple representation of:</p> <ul style="list-style-type: none"> ● different educational levels ● conceptual frameworks ● contexts |

As indicated in Table 1, these guidelines provided a *common set* of guiding principles for reporting the authors’ empirical and conceptual work related to particular (re)formulations of what constitutes learning, learning contexts as well as learners from particular ontological and epistemological perspectives. While the theoretical and epistemological perspectives guiding each study varied, these guidelines, as our analysis will show, created a framework that made a contrastive analysis of similarities and differences visible, and for exploring what difference the differences made in developing a new research agenda.

On What Is And Is Not Transparent

In framing each article as an artifact of an intellectual ecology, we drew on arguments by Anthropologist Michael Agar (1994; 2006) to build conceptual arguments for understanding why these articles were challenging to members of our team. He argued that ethnographically each social world can be viewed as a *languaculture*, and that ethnographers bring their own languaculture, what he called, LC1, to reading and interpreting the languaculture of those, whose worlds they are entering, what he called, LC2. He further argued that when the ethnographer wonders what is happening, then cultural differences become visible, what he framed as a point at which *culture happens*. He defined this process in the following way:

Culture becomes visible only when differences appear with reference to a newcomer, an outsider who comes into contact with it. What it is that becomes visible in any particular case depends on the LC1 that the newcomer brought with them, a newcomer who might be an ethnographer, or perhaps an immigrant, or a new employee, or a tourist. Different LC1/LC2 combinations, different rich points, different translations, different cultures (Agar, 2006; p. 7).

From this perspective, our team, as outsiders to these different theoretical and methodological arguments, found that in reading these articles, we were faced with a range of different languacultures, and thus a series of challenges.

How to understand these challenges is captured in the following elaboration of Agar's argument, in which he proposed ways in which the conceptual understanding of the fundamental concepts of language and culture are interdependent. This elaboration of the fundamental concepts of language and culture, therefore, provides a perspective that can be applied to the *frame clashes* (e.g., Gumperz & Tannen, 1979; Gee & Green, 1998) that we, as readers, encountered as we sought to understand the ways in which the "new" fundamental conceptualizations of learning, learners, and learning contexts related, or not, to those that we brought to this process.

The concept of "culture," like the concept of "language," has to change.

The two concepts have to change *together*. Language, in all its varieties, in all the ways it appears in everyday life, builds a world of meanings. When you run into different meanings, when you become aware of your own and work to build a bridge to the others, "culture" is what you're up to. Language fills the spaces between us with sound;

culture forges the human connection through them. Culture is in language, and language is loaded with culture (Agar, 1994, p. 27-28).

From this perspective, readers may face culture(s) through such language clashes, which can then be turned into what Agar calls *rich points*. These clashes in frames of reference(s), when acted on, become anchors for exploring the roots of such differences, which in this case can then be viewed as laying a foundation for readers to engage in a process of contrastive analysis of how, and in what ways, the authors' conceptual arguments relate to, inform, and/or challenge (or not) their own current perspective(s) on the interdependent concepts of learning, learners and learning contexts. These clashes also make visible what "the new" might be in framing a *new research agenda*.

Reading the Articles as Intellectual Artifacts

An often invisible aspect of understanding differences in research traditions, and how they frame fundamental concepts, not for self but for a larger community, or in this instance, a research agenda, is the formulation and understanding of what constitutes a *program of research*. In this section, we identify not only challenges we faced but make visible the challenges that those proposing a new research agenda will face in the future, if this agenda is to frame one or more new programs of research. Thus, at the center of our approach to reading across research articles is a sociology of knowledge perspective by Philosopher of Education, Kenneth Strike (1974; 1989), who focused not on the methodological approaches but rather on what constitutes a program of research, given the editors' arguments that this is part of a *developing* research agenda. Strike (1989, p. 6), drawing from the work of Kuhn, Toulmin,

Lakatos and others, described a set of governing assumptions of research programs in education as playing the following roles:

- They enable us to distinguish relevant from irrelevant phenomena. That is, they inform us as to what phenomena a given enterprise is expected to deal with. And they tell us what sorts of questions are appropriate to ask about them.
- They provide the context in which theoretical and empirical terms are defined. Indeed, they provide the characterization of what is to count as a theoretical and an empirical term.
- They provide the perceptual categories by means of which the world is experienced.
- They specify the problems that require solution. A problem will be a conflict between the intellectual aspirations of a research program and its current capacity.
- They provide the standards of judgment that we use to evaluate proposed accounts, and they tell us what is to count as evidence for proposed accounts.
- They tell us what is to count as a well-formed or appropriate account of phenomena. Some proposed accounts will be excluded at the outset because they are not properly structured or because they do not fulfill the conception of a proper account within the field.

While the first four governing assumptions framed how to understand the differences among the theoretical and epistemological perspectives inscribed in these articles, given that this special issue represents a developing interdisciplinary and international research agenda, the last two governing assumptions are ones that are yet to be developed. This state-of-affairs, therefore, created a challenge for us as readers -- *how to understand the contributions of different articles* to a larger research agenda.

The following table, Table 2: Analysis of Challenges in (Re)formulating Fundamental Concepts Identified by Authors, explores these principles across articles. It is designed to explore not each principle but rather to identify the challenges that the authors identified in their articles as they sought to develop “new” epistemological perspectives, or programs of

research, that served to guide their approaches to addressing a common set of research questions: *What counted as learning context(s) and how to methodologically study learning and learners in and across times and events in such contexts.* Our team's analysis of the challenges and (re)formulation goals of the authors of each article is presented in the order of the inscription of these articles in both the editorial introduction and the organization of the special issue. The language(s) (re)presented in this table drew on those that the authors used to inscribe *learning, learners and learning contexts*, given our goal was to gain emic or insider understandings of the arguments proposed and made visible by the authors.

Table 2. Analysis of Challenges in (Re)formulating Fundamental Concepts Identified by Authors

| <i>Team of authors</i> | <i>Challenges identified and/or addressed in each article</i> | <i>(Re)formulations of "learning"</i> | <i>(Re)formulations of "learners"</i> | <i>(Re)formulations of "learning contexts"</i> |
|-------------------------------|---|---|--|--|
| Kumpulainen and Rajala | <p>The authors address the challenge of studying the complexity and hybridity involved in technology - mediated settings (specifically, how to describe, define, and analyze learning across contexts) which ruptures the dominant conceptualization of education engagement and learning as predictable and uniform.</p> | <ul style="list-style-type: none"> • Intertwined nature of learning and identity • Identity development is an essential element of engagement and learning • Learning transforms who we are, and what we can do, while identities define how we position ourselves and our actions through which others also position us | <ul style="list-style-type: none"> • Students' identities are not fixed, innate, biologically determined, and arbitrary constructions of individuals • Identities are socially situated, mediated, and produced as well as multiple and shifting | <ul style="list-style-type: none"> • Learning contexts are not simply backgrounds, but rather as being produced, managed, and hybridized in evolving interactions |
| Gilje and Erstad | <p>Previous research on entrepreneurship education mainly draws on surveys and statistical data (i.e., how many schools, students, teachers participate in such programs).</p> <p>The authors frame ways of exploring and documenting aims and objectives of authentic learning across settings over time.</p> | <ul style="list-style-type: none"> • Learning in and out of school has its opportunities and constraints when it comes to authentic learning | <ul style="list-style-type: none"> • While learner's agency is an important element (how individual students get motivated and engaged in activities), "relational agency" or how students connect to relevant others in the process of learning trajectories across different settings is also important | <ul style="list-style-type: none"> • There is a distinction between traditional school context and entrepreneurship education and enterprise projects. • This is more than a hybrid set of contexts; they are markedly different in terms of conceptual organization and activity processes, and thus propose and promote different opportunities for learning |

| | | | | |
|--|--|--|---|--|
| <p>McLay, Renshaw, and Phillips</p> | <p>The authors respond to the call for explicit engagement with the ontology of learning as well as the relationship between knowing and being.</p> <p>In this study, they engage with ontological questions associated with students' use of new learning tools (iPads).</p> | <ul style="list-style-type: none"> ● Learning is a process of developing knowledge and skills (epistemology) as well as selves (ontology) and values and beliefs (ideological becoming) | <ul style="list-style-type: none"> ● Students are not abstracted objects of study, but actors who participate both in and out of school, where they dynamically interact with one another to contribute to meaning-making and self-making | <ul style="list-style-type: none"> ● Learning contexts are “fluid” in that they are no longer bounded by physical walls but stretch across time and space by virtue of digital technology |
| <p>Rasmussen and Damşa</p> | <p>The authors address the challenge of capturing the plurality of actions that were performed and/or emerged across sites and occasions of knowledge resources employed in the process of learning.</p> | <ul style="list-style-type: none"> ● Learning is not bounded by physical walls but stretching across contexts ● Learning is less about addressing info or processing pre-scripted action but more about making sense of knowledge from multitude of sources situated at/within various sites | <ul style="list-style-type: none"> ● Learners face challenges associated with distributed sense-making process ● Learners are expected to engage in “boundary crossing” to assemble clues and resources which are often placed outside the boundaries of formal school settings and tasks | <ul style="list-style-type: none"> ● Context in education is a continually emerging set of interrelated assemblages flowing into the educational occasion or object |
| <p>Leander and Hollett</p> | <p>The authors argue that while recent research on learning across contexts has emphasized the connections/networks of learning, less of it has dealt with spatio-temporal dimensions of learning (i.e., time-space experiences of learners as they move across settings). They address the role of rhythmic analysis in reformulating the notion of learning away from static representation.</p> | <ul style="list-style-type: none"> ● Learning is an outcome of embodied processes that people take from one context to another in rhythmic cycles | <ul style="list-style-type: none"> ● Students create embodied understandings and engage in flow of activities across settings | <ul style="list-style-type: none"> ● Learning contexts constitute fluid, multiple, and longitudinal (overtime) processes |

| | | | | |
|-----------------------|---|--|---|---|
| Sefton - Green | The author addresses the limitations in the language of “mapping” of young people’s learning lives. While digital technology makes us to believe that we can track/map the processes involved in the study of learning, the author questions the use of cartographical language to describe learning lives. | <ul style="list-style-type: none">● Learning cannot be simply conceived as a form of “travel” or “journey” (to and from starting and finishing points)● Mapping learning may not always illuminate the complexity of understanding learning across contexts | <ul style="list-style-type: none">● Young people are not isolated individuals (when it comes to trying to understand their development) | <ul style="list-style-type: none">● There are learning journeys taken, as well as <i>not</i> taken, by young people |
|-----------------------|---|--|---|---|

One caveat is needed to understand the construction of Table 2 and the arguments inscribed -- wherever possible, our team members used the terminology, the language used to inscribe the phenomena, rather than to (re)voice the ideas in our own language. However, the (re)presentation of these languages is based on our interpretation and translation of what was inscribed and therefore in some instances may differ from the "exact" meanings of the language of the authors, for as Agar (2011) argued, ethnography is a *process of translation*. While we acknowledge the potential that there may be differences that the authors may see, our goal in taking this stance is to make visible the interpretive nature of reading across disciplines.

Although we sought to step back from our own individual and collective ethnocentrism, we view the table not as a *representation* of the arguments but as a way of engaging with the authors in order to construct a (re)presentation to make public one possible set of interpretations of the issues raised in developing a new research agenda. One way of reading this table, therefore, is to view it as a *rich point* that can then be used to explore the differences in the conceptual arguments about learning, learners and learning contexts that our team constructed through our iterative, recursive and non-linear readings and discussions of these arguments. Another way to view this table is to view it as an anchor for further dialogues with the authors, and with those wishing to engage in the process of formulating a new research agenda. Therefore, as you read this commentary and engage with the elements of this table, you will want to use the argument in the table as rich points for (re)examining the articles in order to assess how closely our interpretations match those of the authors.

A Closing And An Opening: Potentials For Continuing The Dialogues

As argued in this commentary, the goal of the editors was to make visible how a group of interdisciplinary and international scholars have been engaged in a process of developing a new research agenda, one that will challenge the traditional agenda(s) for studying learning in specific contexts, leading to particular outcomes. In taking this stance, and inviting the authors to make transparent the logics-of-inquiry guiding their actions (logics-in-use), the editors address Rorty's argument about how the "new" can be understood and why a direct challenge does not lead to a dramatic change but requires more and more examples to convince a new generation to take up the new and to try seeing it through the "new" lenses and empirical data associated with each. In this way, new language(s), with differing expressive potentials, will be possible. This approach, therefore, as we have attempted to show, requires readers to step back from what they expect to learn from a given article, in order to build a way of exploring what is possible to know, understand, and envision as needed actions and language(s) to explore learning, learners and learning contexts from different points of view in the ever-changing fluid world(s) of the 21st Century.

We conclude with a further argument drawing on the conceptualization of *culture as a verb* by Anthropologist and New Literacies scholar Brian Street (1993). Street argued that *culture is a verb* when viewed from an anthropological process that focuses on language and cultural processes. In this special issue, although authors do not cite Street's argument, their approaches to analysis of learning focuses on *learning as a verb*, that is, as complex and multi-facted processes, not simply as outcomes framed as nouns. Therefore, these dialogues, and this special issue, when taken as a whole, can be understood as addressing transcendent challenges

and calls for (re)formulating fundamental concepts in education, like the one framed by Smith and Ennis more than six decades ago. These challenges are captured in the following questions that our interdisciplinary and intergenerational commentary team posed in order to read across this theoretically diverse and multi-sited series of articles. We invite readers to consider these as they read across this complex and challenging set of articles:

- *How do the (re)formulations of learning lead to new understandings of what constitutes learningS and learnerS as well as contextS for learning?*
- *How do the ways of studying such (re)formulations, guided by particular (re)conceptualizations, impact what can be understood about the complex, dynamic and situated nature of learning lives of youth within and across times, spaces, actors, tasks and subject matters?*

From this perspective, this special issue of the IJER, therefore, can be viewed as creating both an opportunity for exploring the arguments in these articles and for entering the dialogues within this ongoing community. The question that readers will want to ask, as argued in the sections of this commentary, therefore, is not whether these authors are right or wrong in their (re)formulations, but rather how do these (re)formulations frame limits to certainty (Heap, 1980; Baker & Green, 2007) in what each of our current and future conceptualizations of the inter-relationship of learning, learners and learning contexts enable both researchers and practitioners to understand, know, and undertake in developing new initiatives in the fluid modern world of the 21st Century.

References

Agar, M. (2011). Making sense of one other for another: Ethnography as translation. *Language & Communication*, 31(1), 38-47.

Agar, M. (2006). Culture: Can you take it anywhere? Invited lecture presented at the Gevirtz Graduate School of Education, University of California at Santa Barbara. *International Journal of Qualitative Methods*, 5(2), 1-16.

Agar, M. (1994). *Language shock: Understanding the culture of conversation*. William Morrow & Company.

Aschner, M. J. (1961). The language of teaching. In B. O. Smith & R. H. Ennis (Eds.), *Language and concepts in education* (pp. 112-126). Chicago: Rand McNally.

American Education Research Association. (2006). Standards for reporting on empirical social science research in AERA publications. *Educational Researcher*, 35(6), 33-40.

American Education Research Association. (2009). Standards for reporting on humanities-oriented research in AERA publications. *Educational Researcher*, 38(6), 481-86.

Baker, W. D., & Green, J. L. (2007). Limits to certainty in interpreting video data: Interactional ethnography and disciplinary knowledge. *Pedagogies: An International Journal*, 2(3), 191-204.

Bauman, Z. (2000). *Liquid modernity*. London: Polity Press.

Bauman, Z. (2004). *Identity: Conversations with Benedetto Vecchi*. Cambridge: Polity.

Bloome, D., Beauchemin, F., Brady, J., Buescher, E., Kim, M-Y, and Schey, R. (in press). Anthropology Of Education, Anthropology In Education, Anthropology For Education, in B. Street (Ed.), *International Encyclopedia of Anthropology*, in press.

Castanheira, M. L., Crawford, T., Dixon, C. N., & Green, J. L. (2001). Interactional ethnography: An approach to studying the social construction of literate practices. *Linguistics and Education*, 11(4), 353-400.

Castanheira, M. L., Green, J., Dixon, C., & Yeager, B. (2007). (Re) Formulating identities in the face of fluid modernity: An interactional ethnographic approach. *International Journal of Educational Research*, 46(3), 172-189.

- César, M., & Kumpulainen, K. (Eds.). (2009). *Social interactions in multicultural settings*. Rotterdam,, Netherlands: Sense Publishers.
- Corsaro, W. A. (1981). Entering the child's world: Research strategies for field entry and data collection in a preschool setting. In J. L. Green & C. Wallat (Eds.), *Ethnography and language in educational settings* (pp. 117-146). Norwood, N.J: ALEX Pub. Co.
- Denzin, N. K. (1978). *The research act: A theoretical introduction to research methods*. Chicago: Aldine Pub. Co.
- Ennis, R. H., & Smith, B. O. (Eds.). (1961). *Language and concepts in education*. Rand McNally.
- Erstad, O., Kumpulainen, K., Mäkitalo, Å., Schrøder, K. C., Pruulmann-Vengerfeldt, P., & Jóhannsdóttir, T. (2016). Tracing Learning Experiences Within and Across Contexts. In *Learning across Contexts in the Knowledge Society* (pp. 1-13). SensePublishers.
- Erstad, O., & Sefton-Green, J. (2012). *Identity, community, and learning lives in the digital age*. Cambridge University Press.
- Gee, J. P., & Green, J. L. (1998). Discourse analysis, learning, and social practice: A methodological study. *Review of research in education*, 23, 119-169.
- Glesne, C., & Peshkin, A. (1992). *Becoming qualitative researchers: An introduction* (p. 6). White Plains, NY: Longman.
- Green, J., & Bloome, D. (1997). Ethnography and ethnographers of and in education: A situated perspective. *J. Flood; SB Health; m D. Lapp (Eds.), Handbook for literacy educators: research in the community and visual arts*, 181-202.
- Green, J. L., Castanheira, M. L., Skukauskaite, A., & Hammond, J. W. (2015). Developing a Multi-faceted Research Process. *The Handbook of Classroom Discourse and Interaction*, 26-43.
- Green, J. L., Dai, Y., Joo, J., Williams, E., Liu, A., & Lu, S. C. Y. (2015). Interdisciplinary dialogues as a site for reflexive exploration of conceptual understandings of teaching–learning relationships. *Pedagogies: An International Journal*, 10(1), 86-103.
- Green, J. L., Skukauskaite, A., & Baker, W. D. (2012). Ethnography as epistemology. *Research methods and methodologies in education*, 309.
- Gumperz, J. J., & Tannen, D. (1979). Individual and social differences in language use. *Individual differences in language ability and language behavior*, 305-325.

- Heap, J. L. (1980). What counts as reading: Limits to certainty in assessment. *Curriculum Inquiry*, 10(3), 265-292.
- Heath, S. (1982). Ethnography in education: Defining the essential. In C. Baker & A. Luke (Eds.), *Toward a critical sociology of reading pedagogy*. Philadelphia: John Benjamins.
- Kaur, B. (2012). Equity and social justice in teaching and teacher education. *Teaching and Teacher Education*, 28(4), 485-492.
- Kumpulainen, K. & Erstad, O. (in press). (Re)searching learning across contexts: Methodological considerations. Special Issue of *International Journal of Educational Research*.
- Kumpulainen, K., Hmelo-Silver, C. E., & César, M. (Eds.). (2009). *Investigating classroom interaction: Methodologies in action*. Sense Publishers.
- Kumpulainen, K., & Renshaw, P. (2007). Cultures of learning. *International Journal of Educational Research*, 46(3), 109-115.
- Mitchell, J. C. (1984). Typicality and the case study. In R. F. Ellen (Ed.), *Ethnographic Research*. (pp. 238-240). New York: Academic Press.
- Morine-Dershimer, G. (1988a), Three approaches to sociolinguistic analysis: Introduction. In J.L. Green & J.O. Harker (Eds.), *Multiple Perspective analysis of Classroom Discourse*. (pp. 107-113). Norwood, NJ: Ablex.
- Morine-Dershimer, G. (1988b), Comparing systems: How do we know. In J.L. Green & J.O. Harker (Eds.), *Multiple Perspective analysis of Classroom Discourse*. (pp. 195-214). Norwood, NJ: Ablex.
- Patton, M. Q. (2002). *Qualitative research and evaluation methods*. Thousand Oaks, Calif: Sage Publications.
- Roland, J. (1961). On the reduction of "knowing that" to "knowing how." In B. O. Smith & R. H. Ennis (Eds.), *Language and concepts in education* (pp. 59-71). Chicago: Rand McNally.
- Rorty, R. (1986). The contingency of language. *London Review of Books*, 17, 3-6.
- Smith, B. O., & In Ennis, R. H. (1961). *Language and concepts in education*. Chicago: Rand McNally.

Strike, K. A. (1974). On the expressive potential of behaviorist language. *American Educational Research Journal*, 11(2), 103-120.

Strike, K. A. (1989). *Liberal justice and the Marxist critique of education: A study of conflicting research programs*. New York: Routledge.

Strike, K. A., & Posner, G. J. (1992). A revisionist theory of conceptual change. *Philosophy of science, cognitive psychology, and educational theory and practice*, 176.

Toulmin, S. (1972). *Human understanding*. Princeton, N.J: Princeton University Press.