Abstract
In this response to Kalenic-Craig's (2017) article, “The Rights of the Learner: A Framework For Promoting Equity through Dynamic Formative Assessment,” I consider what implications the RotL framework has for the work that teachers and students must do in learning environments where these rights flourish. The RotL emphasizes student sensemaking and communication in the classroom. Given the realities of classrooms as racialized, gendered, and classed spaces, this emphasis on communication demands critical consciousness for both teachers and students.

This article is in response to

Mathematics educators have been increasingly attentive to the ways the teaching and learning of mathematics advance or undermine our goals for equity and justice. In her article, Kalinec-Craig (2017) offered readers the opportunity to think about rights of the learner (RotL) and how they might enable teachers to promote equity. In this response, I engage the ideas that Kalinec-Craig offered and ask several questions about what kinds of demands such rights might provoke for teachers and students.

Her argument rests on several premises. The first premise is the oft-cited observation that “mathematics classrooms can be restrictive spaces in which not every child is afforded an opportunity to be successful in mathematics” (Kalinec-Craig, 2017, p. 1). And, moreover, that “traditional mathematics instruction typically privileges dominant notions of mathematics while implicitly dismissing the diverse knowledge, culture, and language of all students in our country” (Kalinec-Craig, 2017, pp. 1–2). The second premise shifts from the structures that limit student learning to an observation that how teachers and students communicate in classrooms matters for equity. She wrote, “When students communicate their mathematical thinking through verbal and written justifications, they also have more opportunities to clarify their thinking, to reassess their original strategy, and/or to strengthen their original ideas” (Kalinec-Craig, 2017, p. 2). The importance of communication is then advanced by her third premise about the responsibility of the teacher. While this article is about the rights of the learner, it still pivots on what responsibilities the rights engender for teachers. Kalinec-Craig (2017) argued that if teachers engage in dynamic formative assessment—by using problem-solving interviews, classroom discussions, and questioning techniques that elicit student thinking—then they can create more equitable learning environments. She reasoned that because “teachers learn more about how their students think when the students share their thinking, whether it be correct, inaccurate, succinct, and/or vague, . . . this approach to teaching mathematics helps children to also test out new ideas and develop a deeper understanding of mathematics” (Kalinec-Craig, 2017, p. 2).

Kalinec-Craig (2017) credited an elementary school teacher, Olga Torres, with generating these particular rights:

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All these rights are about sensemaking. Kalinec-Craig (2017) explained her colleague’s rationale for these four as being grounded in an alternative vision for mathematics classrooms as places where students do not just receive and apply information, thereby relying on the authority of the teacher or the text. Instead, students are actively sharing, discussing, and making sense of each other’s ideas to develop their mathematical abilities through reasoned argument. Kalinec-Craig placed value in the notion that classrooms should be places where students’ ideas are visible and where they are honored. Communication in the classroom is central to the RotL, and the rights underscore that classrooms should be safe spaces for children to share their confusions, mistakes, ways of communicating their solution strategies in whatever way makes sense to them.

Kalinec-Craig (2017) framed the discussion of student rights in the context of what teachers are obligated to do in their classrooms because students have these rights. It is in this sense that Kalinec-Craig brought in the frame of formative assessment. There are several key ideas about formative assessment that suit Kalinec-Craig’s argument. Formative assessment practices enable teachers to evaluate information for the purposes of advancing learners’ experiences and understandings. Kalinec-Craig explained, “Teachers who use divergent formative assessments honor students’ voices during instruction so that students learn how to communicate the diverse ways they learn, use, and know mathematics” (p. 4). And further, “…teachers who move toward divergent formative assessments welcome disagreement, confusion, and mistakes as a part of the learning process” (p. 4). Importantly, all these rights suggest that the teacher is in fact a learner, a very specific kind of learner. To borrow a phrase used by my colleague Leslie Herrenkohl, “Teachers must be students of their students.”

Putting forth a set of RotL is provocative in important ways. If we are concerned with the experiences students have in mathematics classroom, if we have certain visions for what constitutes vibrant, affirming, asset-oriented classrooms, what RotL should students be able to exercise? Even if these four are not the ones readers would generate, it is a fruitful beginning to a dialogue about students’ rights, and, I would add, obligations to one another. It is hard to argue against the idea of RotL, and that is not my intent in this appreciative response. Kalinec-Craig (2017) made clear that she’s not arguing that these are the correct set of rights. Recently, for example, I saw a version of these rights shared through social media that included (1) the right to revise one’s thinking and (2) the right to share unfinished thinking and not be judged. The premise of the RotL invites teachers and students to consider what rights to name.

Kalinec-Craig (2017) argued that these rights matter for equity. For example, the third right—to say what makes sense—is important for equity because it enables students, including those who are bilingual or multilingual to express their ideas in multiple languages. The fourth right—to write what makes sense—matters for equity because it enables students to leverage the notational systems and languages they are familiar with and use in the myriad cultural, linguistic and social practices they engage. To further engage the issue of how the RotL matter for equity, I ask the following questions:

- Is it enough to care about student thinking?
- How do the RotL shape what we teach?
- How do students exercise these rights? And what obligations do students have to one another because they hold these individual rights?

My comments are framed by my own positionality, both professionally and personally. I am a mathematics education researcher and teacher educator who has based most of my work with teachers on children’s mathematical thinking. I am keenly interested in the complex work that a teacher does in orchestrating classroom discussions so that students’ ideas are heard and advanced. My personal experience of race, gender, and class in this country is shaped by being a middle-class Iranian immigrant from a country whose culture is not very well understood in the United States and typically portrayed negatively in public discourse and the press. I have always been made aware of my other-ness, and this has shaped my participation in school and my relationships with peers and teachers. I have experienced both hostility and welcome in my schooling experiences. Because of my professional and personal experiences, I care a lot about how students and teachers interact around the discipline of mathematics but also how they come to know one other as people in the world with diverse experiences and histories. Most of my time is spent working alongside educators to improve learning experiences for both teachers and students, especially in linguistically, culturally, and racially diverse low-income communities. This work involves changing how classrooms typically operate and advocating for policies and practices that do not limit students’ opportunities.

Is It Enough for Teachers to Care About Student Thinking?
Kalinec-Craig’s (2017) dual focus on the rights of learners and the benefits for students if teachers listen to their ideas comes at an interesting time in mathematics education research, when we are increasing the number of scholars who use a critical lens to study mathematics education. Since the 1980s, research in the field has seen many advances that inform attention to students’ ideas. The cognitive revolution gave birth to a wealth of studies on student cognition. This body of work gave us insights into what children do and think about as they solve problems and how those conceptions develop over time given certain classroom conditions. Studies of classroom teaching and teaching experiments that followed gave us proof that classrooms could be organized and facilitated in ways that centered students’ ideas and meaning making. These studies generated many more that deeply considered the nuanced roles that teachers play in making classrooms dialogically rich. Cross-cultural research and studies of mathematics in informal settings
have added to and challenged our understanding of how people use mathematics in daily work, in cultural-specific contexts, and in their professions.

More recent studies have investigated students’ experiences in the classroom in discussion-intensive classrooms, unveiling both the possibilities and pitfalls of developing mathematical argumentation skills in diverse classrooms. Classrooms are racialized, classed, and gendered spaces that can be both humanizing and dehumanizing spaces (Aguirre, Mayfield-Ingram, & Martin, 2013; Martin, 2009; Paris & Alim, 2017; Rubel, 2017; Valenzuela, 1999; Vilson, 2014). Mathematics education researchers are calling for attention to how identity and power are always at play in classrooms and how to understand teaching and learning as both political and social processes (Gutiérrez, 2013; Nasir & de Royston, 2013).

The ability to attend to relations of power as they impact RotL demands a lot for what teachers do but also who teachers are and how they understand themselves and their students. Kalinec-Craig’s (2017) view was that equity can be advanced by “pushing and foregrounding students’ ideas and ways of communicating their thinking” (p. 4). As a mathematics educator who has cared deeply about student thinking for decades, I am supportive of this view. But at the same time, there are several other concerns that are vital to this democratic project. To advance justice, teachers must be attentive to more than students’ ways of communicating and their mathematical thinking. Teachers need skills to be able to see and respond to how voice, authority, power and status play out in their classrooms as students exercise these rights. How are students positioning each other by their race, gender, language, class, etc., and how does the teacher figure into these positionings?

Teachers will have to learn a lot more about themselves as well as their students. For teachers, this does mean, as Kalinec-Craig (2017) remarked, continued interrogation of the stereotypes, assumptions, and biases that they hold (see White, Crespo, & Civil, 2016). Teachers must also authentically learn about who students are as people, how their academic and social selves are expressed at school, and how others view and relate to them. Developing a way to observe and understand students’ lived experiences with school and with one another and how they are impacted by their out-of-school experiences is challenging for teachers, who, by definition, are not members of students’ social groups and may also not be members of students’ cultural groups (Ladson-Billings, 2017).

Seeking community mentors and forming alliances toward real partnership with families is one way forward for teachers (see Murrell, 2001). Diversifying our teacher workforce is another way forward because our understandings across cultural and racial divides must be aided by teachers who reflect the cultural diversity of our society (Picower, 2009). How can we pause intentionally, as we learn more about students’ mathematical ideas, to ask questions about our own assumptions about the lived experiences of our students and how limited our own experiences may be in understanding others (and, as Gutiérrez [2009] nicely described, living in the tension of knowing our students and not knowing them)? We must continue to engage teachers’ (and students’) capacity for self-reflection in order to do this.

### How Do the RotL Shape What We Teach?

In my own observations of mathematics instruction, I have often wondered about how the learning of mathematics compares to students’ experiences in other discipline such as the humanities or the sciences, where perhaps they are more likely to experience school tasks as asking fundamentally profound questions about the human condition, human history, and human possibility. “When are we going to use this anyway?” is a common refrain in mathematics classrooms. Do we teach mathematics in ways that help students make sense of themselves and their world, to imagine the world as they wish it to be not as it is? When Kalinec-Craig (2017) described the third and fourth RotL, the rights to say and write what makes sense, she explained they are important for equity because they enable students to express themselves by leveraging the notational and linguistic practices with which they are familiar. These rights implicate not only forms of expression but the content that students find themselves exploring. What are we asking students to make sense about?

Mathematics education researchers—Julia Aguirre, Marta Civil, Indigo Esmonde, Judit Moschovich, Marilyn Frankiestein, Rico Gutstein, Rochelle Gutiérrez, Danny Martin, DIME, Laurie Rubel, David Stinson, to name just a few—have worked to show us how mathematics classrooms could be more affirming, empowering places for teachers and students. The demands that the RotL make of teachers require not only skills in facilitating classroom communication but skills as curriculum developers and identities as social justice, community-oriented educators (Gutstein & Paterson, 2013; Paris & Alim, 2017). How are students using the mathematical concepts to which they are introduced? It’s one thing for students to have the right to say what makes sense when they are answering problems from a text and another when they are trying to solve a problem that is linked meaningfully to ideas or issues they are invested in. Of course, this means that the public systems of education invite, empower, and inspire teachers to adapt and create worthy problems and projects for their students. It requires teachers to have time to think about both continuity and coherence across classrooms within schools—something the standards movement presses for—as well as time to keep learning. I wonder what the RotL mean when taken up by teachers in schools where their curriculum is highly constrained versus schools where teachers are supported to exercise more agency in broadening what has been typically studied through school mathematics? Would a focus on the RotL help teachers question and dismantle school structures such as ability grouping and tracking that unfairly sort students into predetermined pathways?

### How Do Students Exercise These Rights? And What Obligations Do Students Have to One Another Because They Hold These Individual Rights?

Students themselves must consider what it means to come to understand each other’s ways of being, knowing, and thinking in the classroom. How do students begin to exercise these rights and consider their responsibilities to one another? Two of the rights suggest not just how teachers respond to students’ ideas but how students respond to each other’s ideas. Consider what
Kalinec-Craig (2017) explained about the first two rights. The first right—the right to be confused—is important because “students should also have the right to voice when they need support and guidance, without fear of judgement or ridicule” (p. 5). The second right—the right to make a mistake or hold a mathematical misconception—signals the importance of participation in the classroom regardless of whether the answer is correct. Patience, care, curiosity are all implicated in creating classroom spaces where RotL flourish. Students will express ideas that do not make sense to each other. They will get frustrated or impatient or willfully want to exclude ideas. These interpersonal relations of course are likely to be racialized, gendered, and classed. They may be wrapped up in how students ‘think about other’s mathematical capabilities and social affiliations. Imagine the work that students must do to pay attention to who has voice in the classroom. Perhaps the burden of interrupting status differences falls back on teachers, but ultimately, as students develop in their mathematical abilities, to advance our democratic goals, students must also become conscious of the ways that their actions constrain or empower their peer’s abilities to learn.

Learners’ rights create many demands. Reading Kalinec-Craig’s (2017) propositions of four rights led me to consider what demands these rights create for teachers and students. They demand that we place social considerations alongside political ones. They demand that we figure out what it means to know each other. They demand that we figure out what we should be studying and why.

References


It is commonplace to use the term students’ misconceptions, but I have been convinced by Smith, diSessa, and Roschelle’s (1994) “Misconceptions Reconceived” that it’s more fruitful to think about all students’ ideas, correct or not, as conceptions.


