THIS IS NOT MATHEMATICS

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René Magritte’s famous painting *The Treachery of Images* depicts a smoker’s pipe with writing under it that says “Ceci n’est pas une pipe,” which means “This is not a pipe.” We apply this play on language to mathematics classroom communication to raise questions about the teaching and learning of mathematics.

When we were mathematics teachers, we generally thought students should be doing mathematics, and we considered them “off task” if they talked about anything else. Perhaps not surprisingly then, our own and many other research analyses of mathematics classroom discourse often distinguish mathematical discourse from nonmathematical discourse (e.g., Setati, 2005).

However, drawing on others’ work (e.g., Chazan & Ball, 1999) we now explore the storylines intersecting during communication acts expressed by groups of Grade 10 French immersion students, and reflect on the potential for “off task” mathematics for expanding students’ language and mathematical repertoires. In one exchange, for example, in a group comprising two males and one female, storylines came together to influence group dynamics and mathematics. The two male students took charge of the mathematics and the communication. Very little “off task” communication occurred but at one point students brought storylines to the table that were seemingly unrelated to the task at hand (discussing their parents). We question how these storylines affected students’ communication choices (e.g., choosing to not participate in the case of the female student, a male student choosing to disclose his knowledge of the female student’s personal details) and thus the mathematics at hand. Significantly, we wonder if one reason for these bilingual students staying “on task” when doing mathematics is that they are linguistically less equipped to say things “off task” in French.

The classic interpretation of Magritte’s painting is that it is not a pipe. It is an image of a pipe. We suggest that being “on task” with mathematics is like an image of mathematics, different from real mathematics used as a tool in complex situations. We call for work that develops ways for engaging students in more complicated situations and explores differences in the way students connect various storylines to their mathematics in schoolwork, especially in additional-language contexts.

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References
