



Mathematical argumentation as a precursor of mathematical proof

Monday 18 November 2019, 2.30–4.00pm

Room GS4, Donald McIntyre Building, Faculty of Education

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The space given to mathematical proof in compulsory school curricula varies along history or across traditions from a quasi-absence to a formal obligation. However a consensus has emerged on the centrality proof should have in the learning of mathematics. It faces the challenge of taking into account the nature of mathematics at the different grades; this is reflected by the content and vocabulary of institutional discourses. Can research help in clarifying the expression of this learning objective? Can it contribute to better understand the problem of proving at the different grades? These questions will be addressed starting from a proposal to fix the vocabulary and the related concepts. Then, the relations between argumentation, proof and knowledge will be explored. In the end, a discussion will be opened on the benefit and relevance of shaping the notion of mathematical argumentation as a precursor of mathematical proof.



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