

Submission for an invited session, organized by João Araújo

Best strategies for teaching Mathematics online and offline: What can we learn from Psychological Science?

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Teaching does not come without challenges and teaching online can amplify those challenges. What are the best educational strategies that improve learning both in traditional and online classrooms? With the recent preventive measures against COVID-19, many schools shut down, presential classes were canceled, and online teaching and the challenges it brings became more widespread. Psychological science gives us some tools to work around those challenges and even capitalize on online education. How to maximize the positive effects of online education while minimizing the negative ones? The answer resides in using the learning strategies that were already identified as the strategies that maximize learning in traditional classrooms. This is, applying the learning strategies that are based on well-established psychological and pedagogical principles. We will discuss these strategies and how to apply them, especially in the field of Mathematics, which requires, in most cases, hands-on activities and the use of technology that allows presenting formulas and interactive exercises.