The professional identity of teachers-researchers in mathematics

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INDRUM2020

September 14, 2020

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- To study the ideal and declared practices of TRs in mathematics through a disciplinary-based approach
- Part of a general research involving 4 disciplines: Chemistry, Geography, Mathematics, Physics
Theoretical framework and research question

- Theoretical environment related to the profession of TR via the concept of *professional identity* of a teacher (Cattonar, 2001):
  “the characteristics that identify him or her as a teacher and that the teacher shares with other teachers, which he shares in common with other teachers because he belongs to the same professional group”
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Research question

What is the discipline’s imprint on TRs’ teaching practices at the beginning of university?
Methodology

- 12 semi-directive individual interviews, lasting between 30 to 90 minutes, teaching experiences of various length.
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Discussion and perspectives
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- In this contribution, we report on regularities concerning students’ mathematical difficulties, assessment and teacher training.
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- In general: difficulties to adapt to university mathematics, students “do not do math” in secondary school, TRs fail to highlight aspects related to research (tension between ideal courses and actual courses).
Concerning assessment, our analyses reflect two tensions:

1. A tension between what they value and what they practice
2. A tension between students' understanding and exam success

Two striking aspects concerning teacher training of high-education teachers:

1. High-school teacher training is not necessary (half of the respondents)
2. Not opposed to teacher training, but it must be non-disciplinary and about managing a group of students or make them work more effectively
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A book in progress involving several research disciplines: TRs’ teacher training, university teaching and learning, TRs’ teaching practices with disciplinary-based approaches.