

ESTABLISHING CRITERIA FOR TEACHERS' REFLECTION ON THEIR OWN PRACTICES

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The objective of this poster is to present a case study that deals with the analysis of the reflection process of a teacher, who is addressed as Mr. Lopes, for the improvement of the implementation of new contents related to the Riemman integral in the Elementary school level, which he proposes as his end of thesis project (ETP) in the Professional Master's Program in Mathematics in the National Network, Brazil (PROFMAT)

We used the *indicators of didactical suitability* proposed by the Onto-Semiotic Approach to mathematical knowledge and instruction (OSA) (Godino, Batanero & Font, 2007) as theoretical model to analyse the teachers' reflections on how to improve their own teaching practices, connected to the implementation of the didactical activities proposed as part of their ETPs: epistemic suitability, cognitive suitability, interactional suitability, mediational suitability, emotional suitability and ecological suitability.

As in (Breda & Lima, 2016), the teacher, implicitly or explicitly, uses all of the indicators of didactical suitability proposed by OSA (Godino, Batanero & Font, 2007). A problem that is important to address here is that the teacher shows difficulties in finding a balance among the suitability indicators; on the one hand, the author plans an innovation project with high epistemic suitability and, in his reflection, it is clear that he is also concerned about achieving high cognitive demand. However, in order to achieve this, he leaves aside some contents that had previously been planned and, in particular, he is not able to solve the initial problem that he had suggested. In this sense, the learning was not complete and the teacher argues that it was due to lack of time, so in other words, he could not attain good mediational suitability.

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References

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