COURSE CONCEPTS BASED ON EDUCATIONAL VIGNETTES: THE CASE OF OPEN APPROACH AND CONCEPT CARTOONS

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Recently, various types of vignettes have been investigated as developmental or diagnostic tools in mathematics teacher education (Skilling & Stylianides, 2020). The vignettes include Concept Cartoons (Samková, 2020), individual pictures capturing a group of several children in a bubble dialogue. At our university, we created a six-week course based on Concept Cartoons, and implemented it into professional preparation of prospective primary school teachers. The aim of the course was to elicit discussion of prospective teachers about solving and assessing tasks that are open, i.e. tasks that have multiple interpretations of the assignment, multiple correct ways of solving, multiple correct results, or multiple interpretations of the results (Nohda, 2000). The course is based on ten pictures related to various primary school mathematics topics; each of them represents children solving an open task while some of the children propose correct solutions, others incorrect or unclear.

Twelve course participants got the pictures, with a set of indicative questions (Which children are right? Which are wrong? Why?) to answer in written form. The leader of the course analysed the answers, and then orchestrated subsequent discussions. The participants reflected the course in written form. Most of them valued the opportunity to observe and discuss different solutions, and also reported newly gained awareness of the variety of aspects that need to be considered when assessing pupils' performance. Within the coReflect@maths project, we prepare to share similar course concepts with other teacher educators.

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References

Nohda, N. (2000). Teaching by open-approach method in Japanese mathematics classroom. In T. Nakahara, & M. Koyama (Eds.), *Proceedings of PME24* (Vol. 1, pp. 39-53). PME.

Samková, L. (2020). The typology of arithmetical concept cartoons. *South Bohemia Mathematical Letters*, 28(1), 28-36.

Skilling, K., & Stylianides, G.J. (2020). Using vignettes in educational research: A framework for vignette construction. *International Journal of Research and Method in Education*, 43(5), 541-556.