Enhancing teacher education with cartoon-based vignettes: the case of Concept Cartoons

Libuše Samková[1], Karen Skilling[2], Lulu Healy[3], Ceneida Fernández[4], Pere Ivars[4], Salvador Llinares[4], Marita Friesen[5], Jens Krummenauer[6] & Sebastian Kuntze[6]

[1]University of South Bohemia in České Budějovice, [2]University of Oxford, [3]King's College London, [4]University of Alicante, [5]Freiburg University of Education, [6]Ludwigsburg University of Education,

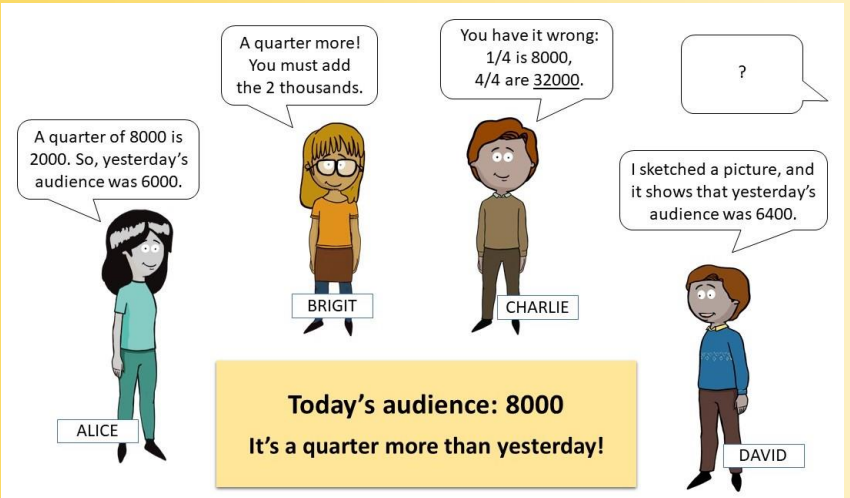
Theoretical Background

- Teacher education – an environment for development of content knowledge (CK) and pedagogical content knowledge (PCK)
- Representations of school practice – tools that allow to diagnose and develop such knowledge (Buchbinder & Kuntze, 2018), e.g. vignettes
- Concept Cartoons – cartoon-based vignettes, with a methodology for diagnosing CK and PCK of prospective mathematics teachers (Samková, 2019)
- Formats: paper-and-pencil (Samková, 2019) or interactive electronic (planned and developed in the **coReflect@maths** project)

Concept Cartoons and DIVER

- Concept Cartoons as pictures of hypothetical classroom situations
- One separate picture, a content-related situation, a bubble-dialogue
- Various correctness of opinions in bubbles
- **Is the teacher able to assess the opinions in the bubbles properly?**
- DIVER (**D**eveloping and **I**nvestigating **V**ignettes in teacher **E**ducation and **R**esearch)
- Interactive electronic form of work with Concept Cartoons
- Aiming to facilitate the process of creating, modifying and reflecting Concept Cartoons and also the process of collecting data on knowledge and its development

Sample Vignette



- Which children in the picture are right and which are wrong?
- Why?
- What might have been the causes of the mistakes?
- How would you advise the children who made the mistakes?
- What could be written in the blank bubble?

Project coReflect@maths

Digital Support for Teachers' Collaborative Reflection on Mathematics Classroom Situations

Erasmus+ Strategic Partnership of six partner universities from four countries

Project Goals

- Bringing together and exchanging the practice of vignette-based professional learning established by the project partners
- Developing vignette-based course concepts for teacher students and teacher educators
- Development of a digital tool which facilitates creating vignettes and collaborative reflection on vignettes

www.coreflect.eu

Activity

How do you see this classroom situation? We would like to invite you to analyse this vignette and to share your analysis with us in an anonymised online survey. Scan the QR-code or follow the link and take part in the activity!

http://ww3.unipark.de/uc/coreflect5

References

Buchbinder, O., & Kuntze, S. (Eds.). (2018). *Mathematics Teachers Engaging with Representations of Practice. A Dynamically Evolving Field*. Cham, Switzerland: Springer. http://doi.org/10.1007/978-3-319-70594-1

Samková, L. (2019). Investigating subject matter knowledge and pedagogical content knowledge in mathematics with the Concept Cartoons method. *Scientia in educatione, 10*(2), 67-79. http://doi.org/10.14712/18047106.1548

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The project coReflect@maths (2019-1-DE01-KA203-004947) is co-funded by the Erasmus+ Programme of the European Union. The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.