

# Enhancing Teacher Education with Cartoon-Based Vignettes: The DIVER Tool



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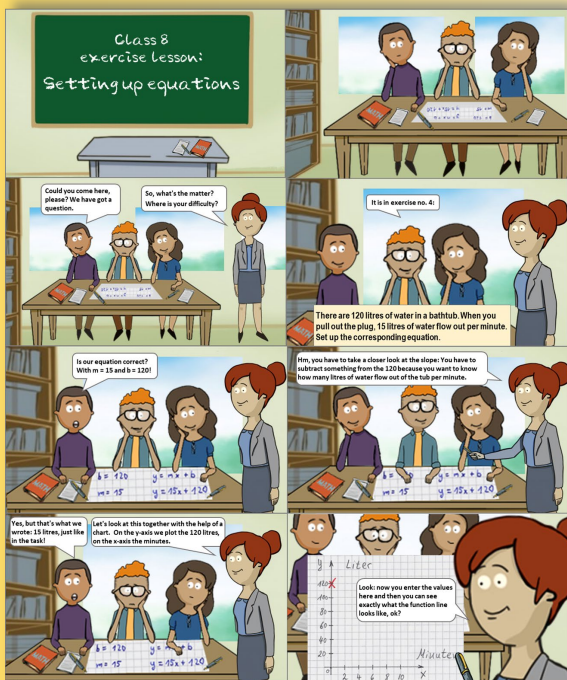
## Theoretical Background

- ❖ The opportunity to engage in representations of practice, so-called vignettes, has proven to be an effective approach in teacher education and corresponding research (Herbst et al., 2011).
- ❖ Questions regarding possible designs of vignette-based learning and testing environments have become essential in this context; the potential of cartoon vignettes has gained increased attention.
- ❖ Cartoon vignettes combine numerous advantages ascribed to video and text vignettes: They allow the systematic, theory-based design and variation of classroom situations whereas individual characteristics that are important to comprehend a classroom situation can easily be added (Friesen & Kuntze, 2018).
- ❖ Compared to the formats video and text, cartoon-based vignettes can be equally suitable to assess and foster teachers' competence in analysing classroom situations (e.g., Friesen, 2017).

## The DIVER Tool: Developing and Investigating Vignettes in Teacher Education and Research (Ivars et al., 2020)

- ❖ A digital tool for creating cartoon-based vignettes; will be available in English, Spanish, Czech and German
- ❖ Allows the creation of cartoon vignettes for digital research and learning environments (e.g., by arranging student and teacher characters in classroom environments, adding speech bubbles, materials, etc.)
- ❖ Enables the collaborative reflection and exchange of vignettes within the learning platform Moodle (by sharing and analysing mathematics classroom situations under various theoretical frameworks and aspects of quality teaching, e.g., regarding the use of multiple representations, the handling of mistakes, etc.)

## Sample Vignette:



## How appropriate is the teacher's response in order to help the students?

Please evaluate regarding:

- the use of representations
- the handling of mistakes

Can you give reasons for your answer?

## 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!

<https://ww3.unipark.de/uc/coreflect/>



Digital Support for Teachers' Collaborative Reflection on Mathematics Classroom Situations

## The project coReflect@maths

Erasmus+ Strategic Partnership:  
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
- DIVER: a digital tool for facilitating the creation of vignettes and collaborative reflection on vignettes

[www.coreflect.eu](http://www.coreflect.eu)

Friesen, M. (2017). Teachers' Competence of Analysing the Use of Multiple Representations in Mathematics Classroom Situations and its Assessment in a Vignette-based Test. Ludwigsburg: Pädagogische Hochschulbibliothek. <https://pshb.lapub.phb.de/frontdoor/index/index/docId/545>  
 Friesen, M. & Kuntze, S. (2018). Competence assessment with representations of practice in text, comic and video format. In S. Kuntze & O. Buchbinder (Eds.), *Mathematics teachers engaging with representations of practice* (pp. 113–130). Cham: Springer.  
 Herbst, P., Chazan, D., Chen, C., Chieu, V. M. & Weils, M. (2011). Using comics-based representations of teaching, and technology, to bring practice to teacher education courses. *ZDM Mathematics Education*, 43(1), 91–103.  
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