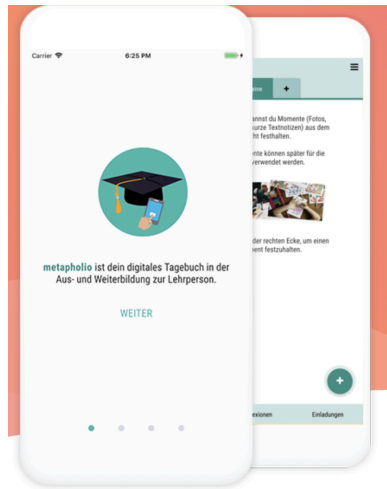


Classification of reflective sentences



Despite the growing potential of artificial intelligence applications, a dilemma is emerging for their use in higher education: On the one hand, the technologies are seen as offering extensive opportunities, e.g., with regard to a more individualized design of study programs, in order to promote student satisfaction and to counteract the tendency to drop out. On the other hand, student defensiveness can increasingly be observed, which goes hand in hand with technology-related uncertainties. This poses a particular challenge for teacher education: While AI technologies could make a significant contribution to solving the teacher shortage by reinforcing the measures of individualized study support that have already proven successful, greater

skepticism towards new technologies can be perceived especially among student teachers - which could manifest itself again to further generations through their future multiplier role. In the PetraKIP project, technology development and education are understood as interrelated tasks. The aim of the project is the interdisciplinary research of AI methods (especially text analysis, machine learning, user modeling, controlled dialogue).

The project presupposes annotation of data according to cognitive Gibbs cycle and creative experimentation with different models in order to find the optimal way to predict on which stage the sentence is, facing the real life development problems and finding balance in the trade-off between the desire to use robust models and lack of data.

Keywords: AI-assisted reflection, Gibbs cycle, NLP.

Supervision / Contacts

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Literature / Links

- [BERT embeddings](#)
- [Automated prediction of reflectiveness](#)
- [Fasttext](#)
- [Representation Learning with Contrastive Predictive Coding](#)

Make sure to add to your project doc

- Link to repo
- Task allocation (which team member contributes which parts?)
- What is the problem? (Why is it important?) What is your goal?
- How do we implement the solution? Structure project in milestones!
- How do we evaluate our solution? Is there a baseline to compare our results to?
- What are the results?
- Discuss / outline future improvements