

Contributed Talk

Splinter Education

THE NEED FOR ASTRONOMICAL CONTEXTS IN INCLUSIVE PHYSICS  
CLASSES

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In response to the increasing heterogeneity of learning groups in German schools, didactical research in Physics has begun to place a greater emphasis on the question of how to create a meaningful context for learning in inclusive settings. This is now crucial because students who require special pedagogical support must be provided with motivating learning situations as well as emotional access to ensure learning success. One approach to addressing learners increasing diversity of interests could be to offer individual contexts for each student; however, programs with this level of individual attention are impractical for organizational reasons. On the other hand, the wide range of students interests could also be accommodated by selecting a context that has the potential to be interesting for all the students (what Feuser (1989) referred to as a ‘Gemeinsamer Gegenstand’ [common subject]). This then serves as a common thread to tie together the curriculum and has the added benefit of releasing positive emotions in the learners. In this presentation, we examine why curricula that employ astronomical contexts are particularly successful for groups of inclusive learners. Our analysis is based on the ‘Modell dualer Unterrichtsplanung’ [dual lesson planning model] (Ferreira Gonzalez et al., 2016) and the IPN and ROSE studies of students learning interests.