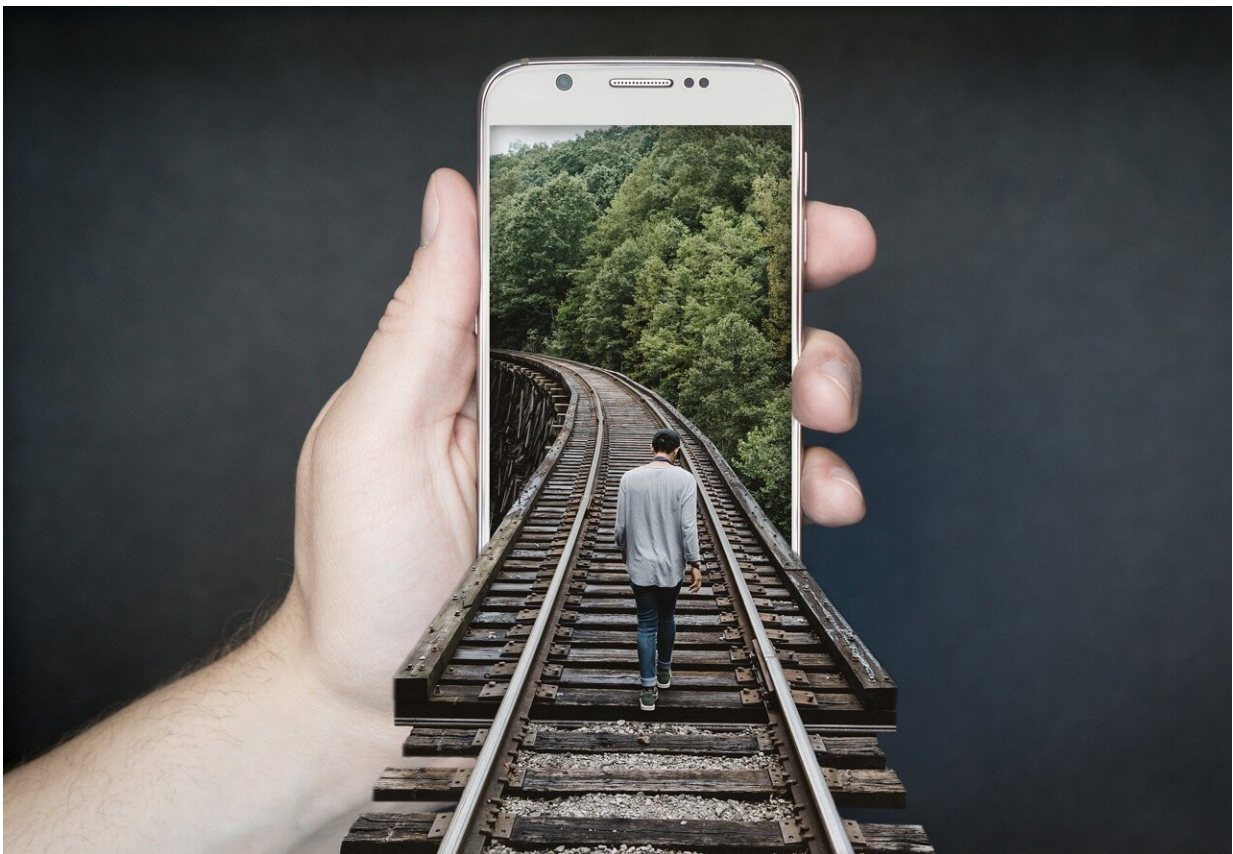


Doctoral thesis: Meaningful mobile outdoor learning activities help students gain lasting knowledge

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The use of smart devices in teaching can make learning more interesting

and connected to everyday life, but often the student becomes a passive consumer of information. In her doctoral thesis, Kadri Mettis examined how to plan and implement mobile outdoor learning in natural sciences so that it would be meaningful and support the development of students' knowledge.

In the [first stage](#), Kadri Mettis mapped out which educational trails are established for mobile outdoor learning. In the course of her research, she found that many of the educational trails established missed out on the opportunities for using the surrounding environment and the technical capabilities of a smart device. At the same time, Mettis also found good examples of educational trails that were problem-based, integrated different subjects, formed a logical whole, and directed the learner to relate to their surroundings.

In the subsequent research stage, Mettis focused on exploring how to support the students' learning activities in mobile outdoor learning. For this, she created educational trails that followed the principles of meaningful learning. The established educational trails were tested with students, studying their impact on the development of students' knowledge and their attitudes.

The results of the study showed that trails based on the principle of meaningful learning helped students to gain lasting knowledge of the topic, and the learning activity was interesting and pleasant for students.

According to Kadri Mettis, the research carried out as part of the [doctoral thesis](#) provided new knowledge and based on them, recommendations for planning and implementing mobile outdoor learning in teaching. The results of the thesis may be of interests to teachers, developers and parents alike. Mettis hopes that subsequent research will include more areas and contexts to expand knowledge of the impact and opportunities of mobile outdoor learning in a variety of

settings.

More information: Thesis: [Designing And Implementing Meaningful Mobile Outdoor Learning In Science Education](#)

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