

Overview Of The Pbl In Geodesy, Geoinformatics And Transport Engineering Education

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SUMMARY

In 2021, the three-year Erasmus+ Capacity Building in Higher Education (CBHE) project LBS2ITS, short for ‘Curricula Enrichment for Sri Lankan Universities Delivered Through the Application of Location-based Services to Intelligent Transport Systems’, started with the aim to introduce and/or update education at four partner universities in Sri Lanka in the LBS (Location-based Services) domain. The level of education in LBS in Sri Lanka is still in its infancy and cannot rapidly deliver the knowledge inputs required to change transport management decision-making in Intelligent Transport Systems (ITS). Modern education methods, such as e-learning and Problem-based learning (PBL), must play a central role in the newly developed courses and course modules. Thereby, syllabi and course contents are developed on the lesson level. The outcome will be a digital learning environment supporting synthetic and real-world learning experiences which encourage self-paced learning modules with digital resource kits for interaction with modern equipment, continuous assessment, and two-way feedback. Webinars and virtual experiences will underpin real-world PBL scenarios. In this paper, the results of a workshop on e-learning and PBL pedagogy are presented. Examples for PBL courses in geodesy, geoinformatics, and transport engineering from the literature and the seven participating project partners underpin the feasibility of the introduction of these new education methods.

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