Tools and practices for structured and documented student reflective thinking as a way to promote learning, enable better evaluation of learning activities and validate the achievement of intended learning outcomes

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It is established that student reflection is very important. There are two aspects of why it is important. Firstly, reflective thinking is good for learning. Most high-level learning outcomes that require experience cannot be achieved without reflection (to learn from own experience one must reflect about it). This is especially true for courses relying on fieldwork as one of main learning activities. Secondly, documented reflective thinking of students is a valuable source of data for the evaluation of study programmes because it can be used to find out whether the way how certain learning activities are designed and implemented is actually good for learning and whether it leads to intended learning outcomes (especially high-level process-related learning outcomes which are normally hard to validate).

However, there is still a lack of understanding when it comes to practicalities, for example, how exactly reflection should be integrated into the course, whether it should be structured somehow and what criteria should be used to identify reflective thinking that indicates learning (so it can subsequently be inferred that learning activity causing such reflection has high educational value). To date, no one had successfully integrated two aforementioned perspectives (reflection for learning + reflection for evaluation) into a coherent and well-substantiated approach that is ready to be applied in practice by educators at any university. My work is aimed at filling this gap using implications from experiential learning theory, constructivism, post-structuralism, and self-determination theory as a starting point." My objective is to develop a coherent vision of how tools and practices for documented reflective thinking should be introduced into educational context to promote learning while enabling better evaluation of study programmes and validation of learning outcomes.

Deductive reasoning. Moving from wider implications to more narrow ones and ultimately inferring practical recommendations and integrating them into a coherent and well-substantiated solution. A coherent vision that integrates tools and practices for student reflection (problem-oriented flow charts, relational concept maps, self-assessment maps, risk assessment maps) and offers new approach for validation of high-level process-related learning outcomes and evaluation of course activities. Results are supplemented by guidelines and instructions for practical implementation.

Universities can use the results of my research to integrate student reflection into the courses both as a way to improve student learning and as a way to enable better evaluation of learning activities and validation of learning outcomes.