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## Pitfalls and Drawbacks in Visual Modelling of Learning Knowledge by Students

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**Abstract :** Knowledge-based systems' design requires the developer's owning the advanced analytical skills. The efficient development of that skills within university courses needs a deep understanding of main pitfalls and drawbacks, which students usually make during their analytical work in form of visual modeling. Thus, it was necessary to hold an analysis of 5-th year students' learning exercises within courses of 'Intelligent systems' and 'Knowledge engineering' in Saint-Petersburg Polytechnic University. The analysis shows that both lack of system thinking skills and methodological mistakes in course design cause the errors that are discussed in the paper. The conclusion contains an exploration of the issues and topics necessary and sufficient for the implementation of the improved practices in educational design for future curricula of teaching programs.

**Keywords:** knowledge based systems, knowledge engineering, students' errors, visual modeling **Conference Title:** ICALT 2017: International Conference on Advanced Learning Technologies

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