Preface

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This year, the workshop on Intelligent Textbooks was organized for the sixth time. It builds on the success of the five previous workshops conducted in 2019[1], 2020[2], 2021[3], 2022[4], and 2023[5], as well as the recent special issue on Intelligent Textbooks[6] published by the International Journal of AI in Education. This workshop series has been attracting contributions addressing a broad range of research questions related to the idea of intelligent textbooks. While the pioneer work on various kinds of intelligent textbook technologies has already begun, research in this area is still rare and spread over several different fields, including AI, human-computer interaction, information retrieval, intelligent tutoring systems, educational data mining, and user modeling. The iTextbooks workshop series has brought together researchers working on different aspects of intelligent textbook technologies in these fields and beyond to establish intelligent textbooks as a developing interdisciplinary research field.

The iTextbooks'2025 workshop was organized on July 26, 2025, in conjunction with the 26th International Conference on Artificial Intelligence in Education, AIED 2025, in Palermo, Italy. For this edition, we had a half-day workshop.

The workshop received 8 submissions (6 full papers and 2 short papers); 6 of them have been accepted (3 full papers and 3 short papers). The workshop was organized in a hybrid manner, with 4 presentations given online and 2 on-site. About 30 people attended the workshop (25 on-site + 5 online participants).

The workshop program was structured as follows.

09:00 - 09:15 Introduction
09:15 - 10:30 Session 1

- Full paper:
  AI-driven Interactive Hierarchical Concept Maps for Digital Learning Environments and Intelligent Textbooks.
  Sergiy Tytenko
- Short paper:
  AI Enhanced Intelligent Texts and Learning Gains.
  Scott Crossley, Joon Suh Choi, Wesley Morris, ***Langdon Holmes*** *and David Joyner*
- Full paper:
  LLM-powered Framework for Automatic Generation of Metacognitive Scaffolding Cues for Introductory Programming in Higher Education.
  Anushka Durg*, Can Kultur, Adam Zhang and Jaromir Savelka*

10:30 - 11:00 Coffee break
11:00 - 12:00 Session 2

- Short paper:
  Lessons from a Multimodal and Trustworthy AI System for Intelligent Textbooks.
  Karan Taneja, *Anjali Singh and Ashok Goel*

[1] http://ml4ed.cc/2019-AIED-workshop/
[2] https://intextbooks.science.uu.nl/workshop2020/
[3] https://intextbooks.science.uu.nl/workshop2021/
[4] https://intextbooks.science.uu.nl/workshop2022/
[5] https://intextbooks.science.uu.nl/workshop2023/
[6] https://link.springer.com/collections/jcjcecejaf

- Full paper:
  Improving Textbook Accessibility through AI Simplification: Readability Improvements and Meaning Preservation.
  Benny G. Johnson*, Bill Jerome, Jeffrey S. Dittel and Rachel Van Campenhout*
- Short paper:
  Using Digital Textbook and Classroom Data to Explore Multimodal (Audio, Visual, & Textual) LLM Retrieval Techniques.
  Brian Wright*, Vishwanath Guruvayur, Luke Napolitano, Doruk Ozar, Ali Rivera, Ananya Sai and Bereket Tafesse*

12:00 - 12:45 Discussions and Conclusion

The workshop website (https://intextbooks.science.uu.nl/workshop2025/) provides additional information regarding the announced calls for papers and the submission procedures. In conclusion, we would like to thank the program committee members of iTextbook'2025 who helped prepare the workshop program:

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