

# Preface

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This year, the workshop on Intelligent Textbooks was organized for the seventh time. It builds on the success of the six previous workshops conducted in 2019<sup>11</sup>, 2020<sup>22</sup>, 2021<sup>33</sup>, 2022<sup>44</sup>, 2023<sup>5</sup>, and 2025<sup>6</sup>, as well as the recent special issue on Intelligent Textbooks<sup>7</sup> published by the International Journal of AI in Education. This workshop series attracted contributions addressing a broad range of research questions related to intelligent textbooks. While the work on various kinds of intelligent textbook technologies has been ongoing for more than 20 years, 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 brings 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. This year's workshop also explores the potential of generative AI techniques in intelligent textbooks.

The iTextbooks'2026 workshop was organized in conjunction with the 27th International Conference on Artificial Intelligence in Education, AIED 2026, in Seoul, Republic of Korea, June 29 – July 3, 2026. For this edition, we had a full-day workshop on Sunday, June 28, 2026.

The workshop received 13 submissions (7 full papers and 6 short papers); 9 of them have been accepted (4 full papers, 4 short papers, and 1 demo). The workshop was organized in a hybrid format, with 3 presentations given online and 6 on-site. About 20 people attended the workshop (15 on-site and 5 online).

The workshop featured a keynote talk, “Open Books, Closed Loops,” delivered by Debshila Basu Mallick from OpenStax. The workshop program was structured as follows.

09:00 - 10:15 Session 1: Interaction with Textbooks

- [09:00 - 09:30] Introduction
- [09:30 - 10:00] Full paper: LLM feedback isn't automatically better: Static scaffolds outperform dynamic feedback in textbook-embedded practice. **Benny G. Johnson**, Jeffrey S. Dittel, Oscar Ortiz, Michelle Clark, Bill Jerome, Rodrigo Bistolfi, Richard Benton, and Rachel Van Campenhout
- [10:00 - 10:15] Short paper: Balancing Efficacy and Engagement in Interactive Texts. **Jonah Bard**

10:15 - 10:45 Coffee break

10:45 - 12:00 Session 2: Keynote + Question Generation

- [10:45 - 11:30] Keynote: Open Books, Closed Loops. **Debshila Basu Mallick** (OpenStax)
- [11:30 - 12:00] Full paper: From concepts to learning objectives to questions: a pedagogically-aware prompting pipeline to generate questions from textbooks. **Sergey Sosnovsky**, Keyang He, and Andre Bekema

12:00 - 14:00 Lunch

14:00 - 15:15 Session 3: Textbook Quality and Enrichment

- [14:00 - 14:30] Full paper: Mitigating the “Triple Burden”: Grade-Level Translation of Science Texts Using Multiagent Systems and Prompt Optimization. **Joel Walsh**, Oscar Arenas, Benjamin Nye, Ashley Marquez, and Karina Mendez

<sup>11</sup> <http://ml4ed.cc/2019-AIED-workshop/>

<sup>22</sup> <https://intextbooks.science.uu.nl/workshop2020/>

<sup>33</sup> <https://intextbooks.science.uu.nl/workshop2021/>

<sup>44</sup> <https://intextbooks.science.uu.nl/workshop2022/>

<sup>5</sup> <https://intextbooks.science.uu.nl/workshop2023/>

<sup>6</sup> <https://intextbooks.science.uu.nl/workshop2025/>

<sup>7</sup> <https://link.springer.com/collections/jcjccejaf>

- [14:30 - 14:45] Short paper: InkSpire: An LLM-Powered System for Designing and Generating Disciplinarily Aligned and Context-Aware Reading Scaffolds. **Yuwei Liang, Ruiqian Wang, and Bodong Chen**
- [14:45 - 15:00] Short paper: Automated Textbook Auditing with Multi-Agent LLM Systems. **Ciprian Cristescu, Adrian Marius Dumitran, Gabriel Ștefan, and Angela Dumitran**
- [15:00 - 15:15] Demo: Embedding In-Browser Linux Labs as Smart Content for Intelligent Textbooks. **Andrzej Wójtowicz**
- 15:15 - 15:45 Coffee break
- 15:45 - 17:00 Session 4: Beyond Text in Textbooks
- [15:45 - 16:15] Full paper: Representing Image-Required Mathematics for Intelligent Textbooks: A Controlled Comparison of Diagram Encodings. **Ethan Croteau and Neil Heffernan**
- [16:15 - 16:30] Short paper: Textbook-Informed Lecture Video Segmentation for Fine-Grained OER Reuse. **Zhaoyi Shi, Lubna Ali, and Ulrik Schroeder**
- [16:30 - 17:00] Discussion

The workshop website (<https://intextbooks.science.uu.nl/workshop2026/>) provides additional information regarding the announced calls for papers and the submission procedures. Here is a summary:

#### TOPICS OF INTEREST

The workshop themes include but are not limited to:

- Modeling and representation of textbooks: examining the prerequisite and the semantic structure of textbooks to enhance their readability;
- Analysis and mining of textbook usage logs: analyzing the patterns of learners' use of textbooks to obtain insights on learning and the pedagogical value of textbook content;
- Generation, manipulation, and presentation: exploring and testing different formats and forms of textbook content to find the most effective means of presenting different knowledge;
- Assessment and personalization: developing methods that can generate assessments and enhance textbooks with adaptive support to meet the needs of every learner using the textbook;
- Knowledge visualization: augmenting textbooks with concept maps, open learner models and other knowledge-rich extensions;
- Collaborative technologies: building and deploying social components of digital textbooks that enable learners to interact with not only content but other learners;
- Smart interactive content: extending online textbooks with various kinds of smart interactive content to improve learning, engagement, learner modeling, and personalization;
- Intelligent information retrieval and question-answering for digital textbooks;
- Content curation and enrichment: sorting through external resources on the web and finding the relevant resources to augment the textbook and provide additional information for learners;
- The synergy between LLMs and intelligent textbooks. The purpose of such integration could be LLM-driven extraction/generation of learning material and knowledge models from textbooks or enrichment/adaptation of the textbook's content and structure with learning objects and services powered by LLMs.

#### IMPORTANT DATES

- Paper submission: May 22, 2026
- Notification of acceptance: June 8, 2026
- Final version of accepted papers: June 23, 2026

## REVIEWING

- Submissions were reviewed by members of the workshop program committee.
- Every paper got between 2 and 3 reviews.

## PROGRAM COMMITTEE MEMBERS

We would like to thank the program committee members of iTextbook'2026 who helped prepare the workshop program:

- Vinay Chaudhri
- Scott Crossley (Vanderbilt University)
- Brendan Flanagan (Kyoto University)
- Reva Freedman (Northern Illinois University)
- Benny Johnson (VitalSource Technologies)
- Noboru Matsuda (North Carolina State University)
- Roger Nkambou (Université du Québec à Montréal)
- Hiroaki Ogata (Kyoto University)
- Benjamin Paaßen (Bielefeld University)
- Philip I. Pavlik Jr. (University of Memphis)
- Cliff Shaffer (Virginia Tech)
- Francesco Sovrano (University of Italian-speaking Switzerland)
- Khushboo Thaker (University of Pittsburgh)
- Ilaria Torre (University of Genoa)
- Brian Wright (University of Virginia)