

Guiding Innovation with Rapid EdTech User Experience Research Nodes

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27 May 2026 | EdMedia 2026 | Edinburgh

SIG Emerging Technologies for Learning and Teaching

ed-tech.at

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EdMedia + Innovate Learning 2026, Edinburgh

Special Interest Group

Emerging Technologies for Learning and Teaching

 Wednesday, 27 May 2026 | 12:45 to 14:00 BST

 share an EdTech example from your own practice

Orientation

*This SIG Emerging Technologies for Learning and Teaching session addresses the **Rapid EdTech User Experience Research Node Manifesto (RETURN)** and explores how rapid, experience-centred research approaches can guide innovation in learning and teaching — connecting educational practice, research, and responsible technology development.*

Workshop Goals

After this session, participants are able to . . .

- understand** how rapid UX research can support decision-making in educational innovation
- explain** the concept and principles of the RETURN Manifesto
- reflect** on the role of user experience data in aligning technology with pedagogical goals
- share and analyse** practical examples of EdTech implementation from their own contexts
- identify strategies** to bridge experimentation and sustainable EdTech development

The Pace Problem in EdTech

- Generative AI, platforms, user expectations, . . . change within months, not years
- Traditional research cycles often arrive *after* the tool has changed
- Decisions are made anyway – by faculty, by teachers, by students

Core Motivation

How do we ensure that EdTech remains pedagogically valuable when technology changes faster than our evidence base?

Outline

1 The RETURN Manifesto

2 SIG Discussion

3 EdTechs Based on Data

4 Recap

R

Rapid

Fast prototyping and iteration ensure **timely and relevant innovation** in educational contexts.

- Necessary because of rapid changes in digital education
- Rapid prototypes surface early problems and keep innovation relevant
- Agile & DevOps principles enable continuous improvements

ET

EdTech

Educational technology is not just technical, but a **systemic** driver of educational **transformation**.

- Integration of pedagogy, computer science, and learning theory
- Sustainable digital transformation by including all relevant stakeholders
- Institutions are recognised as adaptive learning organizations

U

User Experience

Learner-centred design requires continuous, contextual feedback in **authentic classrooms**.

- One-time usability tests miss real-world dynamics and contextual data
- User experience evolves over time and across contexts
- Focus on Human-centred Learning Experience Design (LXD)

R

Research

Design-Based Research **links theory and practice** through iterative and interactive cycles.

- Learning happens in complex, authentic and everyday environments
- DBR enables sustainable innovation in authentic settings
- Research actively shapes, not just observes, educational change

N

Node

Modular deployed **infrastructure**, that respects **ethical** and **legal** requirements for impactful EdTech innovation.

- Containerized deployment
- Protection of sensitive learner data
- Local or GDPR-compliant cloud hosting



Doctoral Thesis
Benedikt Brünner

RETURN – 7 Projects fostering Self-Regulated Learning

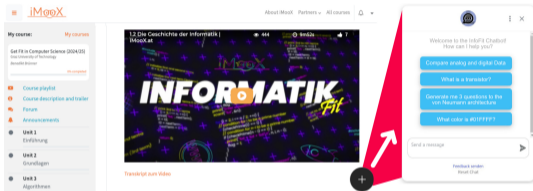
EdTech	Mode	Reference
MOOC RAG Chatbots	Async, Distance	Brünner, Ebner, and Schön, 2025
School Math genAI Chatbot	Sync, In-Person	Mallweger et al., 2026
CollectiveGPT	Sync, Dist. & In-P.	Brünner, Schön, and Ebner, 2025
prompting.school	Async, Distance	Brünner et al., 2026
AI Avatars / RMVPro	Async + Sync	Brünner and Ebner, 2025b
aicast	Async, Distance	Brünner, Leitner, et al., 2025
echoQuiz	Sync, Dist. & In-P.	Brünner and Ebner, 2026

1706 Participants

MOOC RAG Chatbots (Async, Distance)

(Brünner & Ebner, 2025a; Brünner, Ebner, & Schön, 2025)

- **Rapid:** Feb–Sep 2024; Oct 2024–Jan 2025
- **EdTech:** RAG-based AI chatbot embedded in MOOCs
- **UX:** 943 students in Inverse Blended Learning MOOCs
- **Research:** usage data + SRL-coded interaction logs
- **Node:** GDPR-compliant servers, anonymised logs



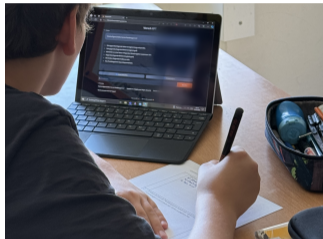
Insight

Used mainly for *information-seeking* (performance) and *quiz-based learning* (reflection).

School Math genAI Chatbot (Sync, In-Person)

(Mallweger et al., 2026)

- **Rapid:** Dec 2023 – Jun 2024
- **EdTech:** fine-tuned AI assistant for school mathematics (quadrilaterals)
- **UX:** 20 Secondary I students
- **Research:** LLM fine-tuning + RAG, classroom pilot
- **Node:** privacy-aware AI usage, anonymised logs



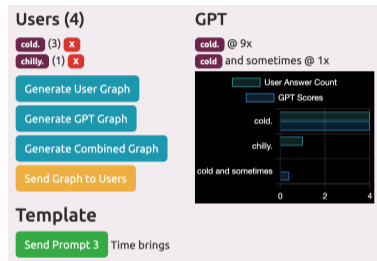
Insight

Age-appropriate scaffolding works;
prompt literacy is the bottleneck.

CollectiveGPT (Sync, Distance & In-Person)

(Brünner, Schön, & Ebner, 2025)

- **Rapid:** May – Dec 2024
- **EdTech:** platform for scripted learning workshops on genAI
- **UX:** 191 teachers (training, first year, professional development)
- **Research:** multiple DBR cycles, pre/post self-evaluation
- **Node:** minimal data collection, open-source, informed consent



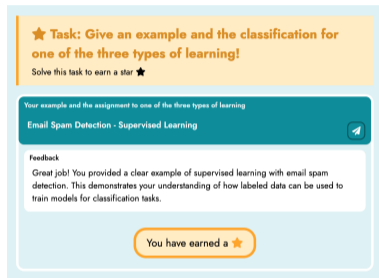
Insight

Empowerment for integrating genAI;
embodied interactions worked.

prompting.school (Async, Distance)

(Brünner et al., 2026)

- **Rapid:** Dec 2024 – May 2025
- **EdTech:** interactive platform for prompt literacy
- **UX:** 133 HTL students + 8 teacher training, 33 professional development teacher participants
- **Research:** DBR cycles with students and teachers
- **Node:** EU-hosted models, privacy-aware analysis



Insight

SRL support *across all three phases* – immediate feedback, quizzes.

AI Avatars / RMVPro

(Brünner & Ebner, 2025b; Schön et al., 2025)

- **Rapid:** Apr – Jun 2024 (school study)
- **EdTech: Rapid Multi-Lingual Video Production with AI avatars**
- **UX:** 20 Secondary I students + MOOC cohort (N=128)
- **Research:** observation, interviews
- **Node:** transparent AI use



Insight

Synthetic educators are convincing – transparency about AI use becomes non-negotiable.

aicast (Async, Distance)

(Brünner, Leitner, et al., 2025)

- **Rapid:** Feb – Apr 2025
- **EdTech:** personalised AI-supported educational podcasts
- **UX:** national + international workshops
- **Research:** iterative user feedback
- **Node:** open-source, transparent AI personalisation



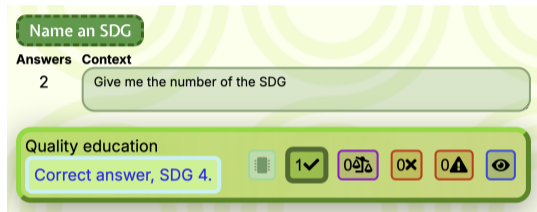
Insight

Hybrid (fixed + dynamic) tracks preserve instructional integrity under personalisation.

echoQuiz (Sync, Distance & In-Person)

(Brünner & Ebner, 2026)

- **Rapid:** Aug 2024 – Jan 2025
- **EdTech:** open-text ARS with AI assistance
- **UX:** 62 students at TU Graz
- **Research:** in-app survey, observation
- **Node:** anonymous, open-source, controlled AI feedback



Insight

Supports the *reflection phase* of SRL without sacrificing anonymity.

Outline

1 The RETURN Manifesto

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4 Recap

 SIG Share a Case

In 60 seconds:
one EdTech you tried,
one thing you learned

 SIG Discussion #1

Sustainability beyond the pilot

Which factor – people, process, or platform –
most often stops a promising EdTech innovation in your setting?

 SIG Discussion #2

Pedagogical alignment

When do users' preferences and learning outcomes point in different directions?

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SCHOOLWISE

- **Building Data Wisdom and Governance in Schools for Evidence-Informed Educational Improvement**
- Erasmus+ Forward-Looking
 - 7 countries
- Educational Data Literacy & open-source Learning Analytics
- TU Graz leads **WP2**
 - State-of-the-art Analysis & Conceptual Framework



How WP2 Collects Evidence – Three Streams

Desk research

OECD, EU Skills
Agenda; national portals;
GDPR, DSA & AI Act
analysis

Online survey

School Leaders
Teachers

Interviews / focus groups

Teachers
School Leaders+DPO
Ethics & Governance
experts

 SIG Question

What educational data do
you (or your institution / schools)
actually use today?

Assessment, attendance, observations, dashboards, LMS logs, AI tools... ?

 SIG Question

What would *actually* work well for your institution / school?

Which kinds of data — and which forms of governance — would make a real difference in everyday practice?

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“ Closing Notions ”

- *“How do students become masters of their own learning processes?”* (Zimmerman, 2008)
- *“We shape our tools and thereafter our tools shape us.”* (Dator, 2019)
- *“Technology only creates new opportunities; it is up to us to decide which ones to pursue.”* (Harari, 2024)

Goals Revisited – Did We Get There?

After this session, participants are able to...

- ✓ **understand** how rapid UX research can support decision-making in educational innovation
- ✓ **explain** the concept and principles of the RETURN Manifesto
- ✓ **reflect** on the role of user experience data in aligning technology with pedagogical goals
- ✓ **share and analyse** practical examples of EdTech implementation from their own contexts
- ✓ **identify strategies** to bridge experimentation and sustainable EdTech development

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Open Questions



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Your Opinion Matters: SCHOOLWISE Survey → June 15

School Leaders



[ec.europa.eu/eusurvey/runner/
school-leaders-survey-
building-data-wisdom-school](https://ec.europa.eu/eusurvey/runner/school-leaders-survey-building-data-wisdom-school)

Teachers



[ec.europa.eu/eusurvey/runner/
teacher-survey-
building-data-wisdom-school](https://ec.europa.eu/eusurvey/runner/teacher-survey-building-data-wisdom-school)

10 minutes | 8 languages (EN, DE, FR, BG, ES, IT, NL, HR) | please forward

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Call: *Erasmus+ Forward-Looking Projects* |
ERASMUS-EDU-2025-PI-FORWARD-DIGITAL-DM



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