2023 IEEE VR KELVAR Workshop: K-12+ Embodied Learning through Virtual and Augmented Reality (8th Annual Workshop)

Organized in conjunction with the **IEEE Virtual Reality 2023**

DESCRIPTION

K-12+ (K-12 and higher ed) education is currently undergoing a technological revolution creating opportunities for Virtual-, Augmented-, and Mixed-Rea ⓘ ɔased learning (hereafter referred to as XR [extended reality] technologies. Technology integration will continue to increase as mobile devices penetrate all socioeconomic

strata, and as XR technologies become affordable to schools, vocational education providers, universities, a informal educational settings. These technologies have the potential to facilitate effective learning by: developing the ability to engage students of all ages with interactive 3D simulations of real-life and artificial phenomena; presenting information that is spatially – and temporally – integrated with real objects; leveraging whole-body motions to depict and reinforce learning content. However, there are many questions about the integration of such experiences into the classroom, such as: What curriculum topics might be addressed through XR technologies?; What socio-cultural, psychological and physiological mechanisms underlie embodied cognition?; How can we design experiences that are appropriate for the different stages of human development?; How will pedagogical approaches be influenced by such technologies?

In this workshop we aim to bring together educators, developers and researchers who are interested in creating and deploying XR technologies for the educational contexts of the future. The workshop will enable participants to discuss and engage with different approaches for designing and integrating XR technologies with a specific focus on the challenges and potential for embodied learning in the classroom for K-12, vocational and higher education.

INTENDED AUDIENCE

We expect the audience will be attendees to the IEEE Virtual Reality conference, specifically those interested in educational technology:

- Academic researchers in augmented / virtual / mixed reality
- Learning psychologists
- Industry organizations for children's education
- Teachers and educational researchers
- Informal education technology designers

WORKSHOP SCHEDULE

The KELVAR Workshop is scheduled for:

- Half-day Workshop
- TBA (Saturday March 25th or Sunday, March 26th)

SUBMISSION TOPICS

We welcome preliminary research results and thought-provoking position papers, on topics related to XR learning for K-12+:

- VR, AR & MR Technologies and Applications for formal and informal education sites (e.g.: classrooms, libraries, museums, afterschool prog s)
- Theories and Applications of Embodied Cognition and Learning

- Curriculum-based Educational Applications
- Student-Teacher Relationships and Pedagogical Implications
- Classroom Integration of Technology
- Teacher and Student Content Authoring Tools

ORGANIZERS

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DEADLINES AND SUBMISSION FORMAT

- Full submission deadline: **January 14, 2022**
- Notification of acceptance: **January 20, 2022**
- Camera ready paper deadline: **February 3, 2022** (cannot be extended, final deadline)

The organizing committee will select submissions based on the quality and contribution of the work relating to embodied learning in education. We seek contributions in the following formats:

1. Empirical Papers: Early Research and Work In Progress (4-6 pages) - Empirical results and contributions to the field.
2. Position Papers (3-4 pages) - Interesting and possibly controversial points of view, and approaches to foster a discussion at the event.
3. Demo Papers (2-4 pages) - VR demos that could potentially have an educational application. If you have submitted a demo to IEEE VR, please submit a short description of your demo and include a description of potential educational applications for your demo. Videos of the demonstration are required. Demos are expected to be demonstrated at the workshop.

You can **submit papers** at: https://nr recisionconference.com/~vr Select the IEEE VR 2023 Workshop: K-12+ Embodied Learning through V and AR dropdown menu.

Papers must be written in English and follow the IEEE Computer Society format found at: http://www.cs.sfu.ca/~vis/Tasks/camera.html

Please e-mail any questions to mmos@cin.ufpe.br

VISIBILITY OF SUBMISSIONS

All workshop papers will be published in the IEEE Digital Library and shared on the workshop website.

We may follow with an opportunity to contribute to a special issue in Frontiers in Virtual Reality.

Looking for previous workshop years ?

Link: KELVAR 2022

Link: KELVAR 2021

Link: KELVAR 2020

Link: KELVAR 2019 - **2019 Workshop Takeaway Discussion Notes**

Link: KELVAR 2018 - **2018 Workshop Takeaway Discussion Notes**

Link: KELVAR 2017 - **2017 Workshop Takeaway Discussion Notes**

Link: KELVAR 2016