

Workshop on Learnersourcing: Student-Generated Content @ Scale

Steven Moore¹, Paul Denny², Hassan Khosravi³, Chris Brooks⁴, John Stamper¹

¹ *Carnegie Mellon University, Pittsburgh, Pennsylvania, United States*

² *University of Auckland, Auckland, New Zealand*

³ *University of Queensland, St Lucia, Queensland, Australia*

⁴ *University of Michigan, Ann Arbor, Michigan, United States*

The first annual workshop on Learnersourcing: Student-generated Content @ Scale took place at Learning @ Scale 2022 conference. This workshop exposed attendees to the ample opportunities in the learnersourcing space, including instructors, researchers, learning engineers, and many other roles. Participants from a wide range of backgrounds and prior knowledge on learnersourcing benefitted and contributed to this workshop, as learnersourcing draws on work from education, crowdsourcing, learning analytics, data mining, machine learning, and many more fields. Additionally, as the learnersourcing process involves many stakeholders (students, instructors, researchers, instructional designers, etc.), multiple viewpoints helped to inform what future student-generated content might be useful, new and better ways to assess the quality of the content and spark potential collaboration efforts between attendees. We ultimately showed how everyone can make use of learnersourcing and have participants gain hands-on experience using existing tools, create their own learnersourcing activities using them or their own platforms, and take part in discussing the next challenges and opportunities in the learnersourcing space. Our workshop attendees were interested in scaling the generation of instructional and assessment content and those interested in the use of online learning platforms.

Prior to the workshop, we provided participants with access to the two core systems being discussed at the beginning of the session, PeerWise and RiPPLE. Participants were able to investigate the activities and affordances each system offers, the review process for questions, and much more to both learn about and even participate in learnersourcing themselves. Our hope was that during the workshop, attendees could then ask any questions and gain a better understanding of the types of learnersourcing data, if they wish to do so, before we meet. Finally, we posted a brief survey to collect the backgrounds and interests of the participants to help tailor our discussions and activities.

The workshop focus was on examining the tools, processes, and content that is both used and generated through learnersourcing. We began with introductions and an overview of the learnersourcing landscape, to bring all participants, regardless of background, up to speed on the concept and latest trends. Two presentations and demos were then run to highlight different learnersourcing tools, with an emphasis on how the student-generated content can be used by instructors and researchers. We then had participant presentations, where the accepted submissions were presented for roughly five minutes each. Following that, we held a thirty-minute break that included coffee and light snacks. From there, we then demonstrated how participants can add learnersourcing activities of their own to practically any piece of educational technology (MOOCs, LMSs, etc.). Participants then engaged in a discussion around the challenges, opportunities, and future of learnersourcing, including how we can incentivize quality student-generated content, while also empowering the instructors and learners with insights. The workshop concluded with a summary of the day's events, core challenges and opportunities we addressed in the discussions, and an emphasis on future collaborations.

During the workshop, these key questions and ideas were addressed by the committee and participants:

- Incentivizing student participation with learnersourcing activities
- Exploring novel formats of learnersourcing content
- Assessing student-generated content
- Incentivizing high-quality student contributions
- Providing actionable and explainable insights to students and teachers

- Supporting multi-institutional sharing and collaboration with learnersourced content

- Training students to develop high-quality resources
- Exploring models of co-creating content
- Encouraging student participation and engagement with learnersourcing

Once the workshop was concluded, we began working on publishing the accepted papers as part of a workshop proceedings. Additionally, we hope the interactions during the workshop to result in the adoption of learnersourcing for many of the participants, whether that be using one of the tools, the discussed datasets, or creating learnersourcing activities in their own platforms and courses. We also offered participants the chance to join a Slack channel and mailing list dedicated to sharing out advances in learnersourcing. Through these channels, we will continue to share datasets collected from these and other learnersourcing systems. We envision that these datasets can be leveraged by participants for future studies and potentially be the focus of a future workshop or competition at L@S. Ultimately, we want to keep the participants involved and promote collaboration between attendees. We hope to repeat this workshop, as we strive to make this become part of the basis for a community of researchers who are interested in learnersourcing and assessment generation at scale.