

AIED 2013 Workshops Proceedings
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Formative Feedback in Interactive
Learning Environments (FFILE)

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<https://sites.google.com/site/ffileworkshop/>

Preface

Educators and researchers have long recognized the importance of formative feedback for learning. Formative feedback helps learners understand where they are in a learning process, what the goal is, and how to reach that goal. While experimental and observational research has illuminated many aspects of feedback, modern interactive learning environments provide new tools to understand feedback and its relation to various learning outcomes.

Specifically, as learners use tutoring systems, educational games, simulations, and other interactive learning environments, these systems store extensive data that record the learner's usage traces. The data can be modeled, mined and analyzed to address questions including when is feedback effective, what kinds of feedback are effective, and whether there are individual differences in seeking and using feedback. Such an empirical approach can be valuable on its own, and it may be especially powerful when combined with theory, experimentation or design-based research. The findings create an opportunity to improve feedback in educational technologies and to advance the learning sciences.

The FFILE workshop aims to advance and encourage research on using data to understand and improve feedback and interactive learning environments. The organizers hope to facilitate the exchange of ideas and the growth of the community of researchers who are interested in these topics. As evidenced by the publications in this volume, using data to understand and improve feedback is important and timely. The papers cover a variety of topics, including rubric-based automated assessment of student drawings of chemical reactions (Rafferty et al.), IRT-based modeling of the effect of feedback on analogical reasoning in children (Stevenson et al.), and an assessment technique for student responses that relies on student participation (Jordan et al.).

Each submission to the workshop was reviewed by three members of a Program Committee, which included the co-chairs and representatives of academia, industry and independent research institutions. The co-chairs thank the Program Committee for diligent reviewing and service.

The co-chairs also thank Erin Walker and Chee-Kit Looi, the AIED 2013 Tutorial and Workshop Chairs, and Andrew Olney and Phil Pavlik, the AIED 2013 Local Arrangements Chairs, for their tireless assistance in helping us organize the workshop.

The workshop will include talks, posters, demos, and interactive activities. The organizers hope that the workshop will be of interest to the wider AIED community.

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