Proceedings of the 5th Workshop on Awareness and Reflection in Technology-Enhanced Learning

In conjunction with the 10th European Conference on Technology - Enhanced Learning: Design for Teaching and Learning in a Networked World

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Awareness and reflection in technology enhanced learning

Awareness and reflection are viewed differently across the disciplines informing Technology Enhanced Learning (CSCW, psychology, educational sciences, computer science and others). The ARTEL workshop series brings together researchers and professionals from different backgrounds to provide a forum for discussing the multi-faceted area of awareness and reflection.

Through the last ARTEL workshops at EC-TEL the addressed topics are converging towards the usage of awareness and reflection in practice, its implementation in modern organisations, its impact on learners and questions of feasibility and sustainability for awareness and reflection in education and work. To reflect the growing maturity of research in ARTEL over the years the workshop particularly invited contributions that dealt with the application of awareness and reflection in practice. This is encapsulated in the workshop motto:

> Awareness and Reflection in Practice: How can awareness and reflection technology become common in work practice and how does it change work practices?

Summary of the contributions

The #ARTEL15 workshop accepted 3 full papers, and 7 short paper. The accepted papers discuss awareness and reflection in formal education, outside formal education, and methods and analytics of awareness and reflection research.

Three papers focus on technology enhanced awareness and reflection in formal eduction.

The full paper 'Annotations as reflection amplifiers in online learning - an exploratory study' of Dominique Verpoorten, Wim Westera, and Marcus Specht discusses an annotation tool, and experiment to investigate the effects of three conditions: No annotations, free-note annotations, and structured question-based annotations. The paper provides insight into annotations as reflection amplifiers.

The short paper 'Formal concept analysis for modelling students in a technology-enhanced learning setting' of Michael A. Bedek, Michael Kickmeier-Rust, and Dietrich Albert presents the Formal Concept Analysis (FCA) framework for visualising a domain with concept lattices. FCA aims at facilitating student reflection upon their learned and still-to-learn concepts via an open learning modelling approach.

The short paper 'Learning to look - purpose and design of an awareness-raising online course in veterinary sciences; of Sophie Tasnier, Valeria Busoni, Christian Hanzen, Jeff Van de Poel, Geraldine Bolen, Catherine Delguste, Nadine Antoine, Veronique Delvaux, Tania Art, and Dominique Verpoorten discusses an approach to improve veterinary student visual awareness in use of clinical images.

Four papers discuss technology enhanced reflection and awareness outside formal educa-

tion.

The full paper 'Prompting users to facilitate support needs in collaborative reflection of Oliver Blunk, and Michael Prilla outlines a concept of how to support collaborative reflection with the help of prompts. They show an initial implementation of a prototype and an approach how to evaluate the concept.

The short paper 'A course concept for enhancing reflective learning - bringing research project results into the field' of Nils Faltin, Margret Jung describes the development of a course for learning time management for professionals. The course is based on reflective learning and practice, in a mix of coaching and computer-support.

The short paper 'Feeler: supporting awareness and reflection about learning through EEG data' of Eva Durall, and Teemu Leinonen presents a prototyp which aims at supporting awareness and reflection about learning experiences through student's EEG data.

The short paper 'Mood in the city - data-driven reflection on mood in relation to public spaces' of Viktoria Pammer discusses potential benefits for stakeholders, as well as system design issues, for reflection on urban development issues with mood as entry point to reflection.

Three papers elaborate on methods and analytics of awareness and reflection research in technology enhanced learning.

The full paper 'Keywords of written reflection - a comparison between reflective and descriptive datasets' of Thomas Daniel Ullmann investigates a method to derive reflection keywords by contrasting two datasets, one of reflective sentences and another of descriptive sentences. The reflection keywords are discussed in the context of a model for reflective writing.

The short paper 'The LearnWeb formative assessment extension: Supporting awareness and reflection in blended courses' of Alana Morais, Ivana Marenzi, and Deirdre Kantz presents work about the development of visualisations summarising activity of users, groups, and classes of a collaborative sharing and working platform.

The short paper 'Deploying learning analytics for awareness and reflection in online scientific experimentation' of Alexander Mikroyannidis, Aitor Gomez-Goiri, John Domingue, Christos Tranoris, Daan Pareit, Jono Vanhie-Van Gerwen, and Johann M. Marquez-Barja introduces a European initiative for online learning and experimentation (FORGE), especially its aim to use of learning analytics to support awareness and reflection for learners and educators.

Awareness and reflection workshop series

The official workshop webpage can be found at `http://teleurope.eu/artel15`

The 5th Workshop on Awareness and Reflection in Technology Enhanced Learning (AR-TEL 2015) is part of a successful series of workshops.

- 4th Workshop on Awareness and Reflection in Technology Enhanced Learning (AR-

TEL14). Workshop homepage: `http://teleurope.eu/artel14`. Proceedings: `http://ceur-ws.org/Vol-1238/`.

- 3rd Workshop on Awareness and Reflection in Technology Enhanced Learning (ARTEL13). Workshop homepage: `http://teleurope.eu/artel13`. Proceedings: `http://ceur-ws.org/Vol-1103/`.

- 2nd Workshop on Awareness and Reflection in Technology Enhanced Learning (ARTEL12). Workshop homepage: `http://www.teleurope.eu/artel12`. Proceedings: `http://ceur-ws.org/Vol-931/`.

- 1st European Workshop on Awareness and Reflection in Learning Networks (ARNets11). Workshop homepage: `http://teleurope.eu/arnets11`. Proceedings: `http://ceur-ws.org/Vol-790/`

- Augmenting the Learning Experience with Collaboratice Reflection (ALECR11). Workshop homepage: `http://www.i-maginary.it/ectel2011/index.html`

- 1st Workshop on Awareness and Reflection in Personal Learning Environments (ARPLE11). Workshop homepage: `http://teleurope.eu/arple11`. Proceedings: `http://journal.webscience.org/view/events/The_PLE_Conference_2011/paper.html#group_Proceedings_of_the_1st_Workshop_on_Awareness_and_Reflection_in_Personal_Learning_Environments`

To stay updated about future events, to share your research, or simple to participate with other researchers, consider joining the group about Awareness and Reflection in Technology Enhanced Learning:
`http://teleurope.eu/artel`

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September 2015   Milos Kravcik,
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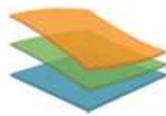Thomas Ullmann, The Open University, United Kingdom

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Supporting projects

http://www.mirror-project.eu

http://learning-layers.eu

http://www.laceproject.eu/

http://wespot-project.eu

http://employid.eu

http://www.boost-project.eu

http://ict-forge.eu/

Contents