



Proceedings of the 2nd International Workshop on Research 2.0

At the 5th European Conference on Technology-Enhanced Learning:
Sustaining TEL

Barcelona, Spain, September 28, 2010

Erik Duval
Fridolin Wild
Peter Scott

Thomas Ullmann
Stefanie Lindstaedt
(Eds.)

Please refer to these proceedings as

Erik Duval, Thomas Daniel Ullmann, Fridolin Wild, Stefanie Lindstaedt & Peter Scott (eds.): Proceedings of the 2nd International Workshop on Research 2.0. At the 5th European Conference on Technology Enhanced Learning: Sustaining TEL. Barcelona, Spain, September 28, 2010, CEUR-WS.org/Vol-675, ISSN 1613-0073.

© 2010 for the individual papers by the papers' authors. Copying permitted for private and academic purposes. Re-publication of material from this volume requires permission by the copyright owners.

Address of first editor:

Erik Duval
Katholieke Universiteit Leuven
Department of Computer Science
Celestijnenlaan 200a
B-3000 Leuven, Belgium
erik.duval@cs.kuleuven.be

The front-cover was created by Harriett Cornish (The Open University, KMl).

Editorial: Research 2.0 for TEL - Four Challenges

In recent years, Web 2.0 has become manifest in new types of applications causing fundamentally new experiences of large-scale social interaction. It has affected the way people communicate, share, collaborate, and - ultimately - participate on the Web. The technologies associated with "the Web 2.0" have a focus on broadened participation by lowering the technical barriers for users. Over the years, the ability to publish content on the Web with little technical knowledge has created not only a new level of public accessible data, but also created the dynamic world of the social Web. The openness of the Web also allowed building new services based on old ones, fostering the development of a mash-up culture.

The philosophy underpinning reflects back on the practice of researchers, not only in tech savvy areas of research. However, what does this really mean? Is it about the adoption of existing tools and services? Is it about the (re-)development of applications based on success criteria of Web 2.0 applications? Is it about the distillation of good practice and their diffusion amongst researchers, either bottom-up or top-down? What type of methodology is appropriate to investigate Research 2.0 phenomena?

As concluded during the workshop, at least four challenges are vital for future research. The first area is concerned with availability of data. Access to sanitized data and conventions on how to describe publication-related meta-data provided from divergent sources are enablers for researchers to develop new views on their publications and their research area. Additional, social media data gain more and more attention. Reaching a widespread agreement about this for the field of technology-enhanced learning would be already a major step, but it is also important to focus on the next steps: what are success-critical added values driving uptake in the research community as a whole?

The second area of challenges is seen in Research 2.0 practices. As technology-enhanced learning is a multi-disciplinary field, practices developed in one area could be valuable for others. To extract the essence of successful multi-disciplinary Research 2.0 practice though, multi-dimensional and longitudinal empirical work is needed. It is also an open question, if we should support practice by fostering the usage of existing tools or the development of new tools, which follow Research 2.0 principles. What makes a practice sustainable? What are the driving factors?

The third challenge deals with impact. What are criteria of impact for research results (and other research artefacts) published on the Web? How can this be related to the publishing world appearing in print? Is a link equal to a citation or a download equal to a subscription? Can we develop a Research 2.0 specific position on impact measurement? This includes questions of authority, quality and re-evaluation of quality, and trust.

The tension between openness and privacy spans the fourth challenge. The functionality of mash-ups often relies on the use of third-party services. What happens with the data, if this source is no longer available? What about hidden exchange of data among backend services?

This year's Research 2.0 Workshop at the EC-TEL 2010 Conference in Barcelona had an emphasis (a) on tools, applications, and infrastructure components supporting researchers

and (b) on insights into how practices of researchers change. It combined quantitative and qualitative approaches shedding light on different facets of Research 2.0.

Kraker, Fessl, Hoefler, and Lindstadt present in their paper "Feeding TEL: Building an Ecosystem Around BuRST to Convey Publication Metadata" a system fostering the exchange publication meta-data. They propose to use a semantically enriched RSS format, which allows institutions to exchange publication meta-data and to make this meta-data accessible for research. The paper also presents complementing services and widgets, and outlines the benefit of the approach for institutions.

Parra and Duval describe in their paper "Filling the Gaps to Know More! About a Researcher" a mobile application called More! that serves the discovery of researcher profile information about a speaker at a conference. Their approach takes into account the various identities of researchers on the Web to present relevant information for researchers with a unified interface. The mobile application presents information about the researcher, the current work, and social handles.

Joubert and Sutherland look at the practice of collaboratively writing a deliverable about vision and strategy for the STELLAR network of excellence. In their paper "Research 2.0: Drawing on the Wisdom of the Crowds to Develop a Research Vision" they outline their experiences with a wiki software in the collaborative writing process. They discuss risks and outline strategies to overcome them. They especially highlight the importance of the engagement of the contributors, the discussion features of wikis, and the clarification of the overall goal of the collaboration.

Vandeputte and Duval report on a multi-touch table, called the ScienceTable, in their paper "Research at the Table". They focus on the support of researchers in finding scientific papers. Researchers can explore the co-author space of publications. Two tasks are supported. Researchers can either use the multi-touch table to explore the publication world top-down or they can use the table with a bottom-up approach, exploring the neighbourhood of authors.

The interactive visualization Muse is described in the publication "Muse: Visualizing the Origins and Connections of Institutions based on Co-authorship of Publications" of Till Nagel and Erik Duval. The focus on this visualization is on exploring the collaborations between institutions. Therefore, they geo-locate the affiliation of authors. This gains insights into the collaboration network of institutions, regions, and countries. Same as the ScienceTable, Muse runs on a multi-touch table.

The paper "Tools to Find Connections between Researchers - Findings from Preliminary Work with a Prototype as Part of a University Research Environment" of Hensmann, Despotakis, Brandic, and Dimitrova presents tools of the JISC Brain (Building Research and Innovation Networks) project with emphasis on identifying connections between researchers, as well as researchers and business and other wider partners. The tools described in the paper provide facilities for researchers to search for other researchers by keywords, which are related to own work, and to find links between researchers. Central to their work is a Research 2.0 approach supporting researchers in several stages of their research carrier.

Wild and Ullmann explore the collaboration networks of deliverables of the STELLAR

network of excellence in their paper "The Afterlife of "Living Deliverables": Angles or Zombies". It focuses on collaboratively authored online project reports, that use a wiki software to support the writing, but also serve to enable knowledge exchange after the submission deadline. While wikis tend not to emphasize authorship of individuals, versioning history data of the wikis allow drawing conclusions on the nature of the collaboration and particularly on which authors collaborated on text passages and topics. In their empirical investigation, they describe the collaboration on a deliverable before and after the deadline. They state that most of the deliverables are used also after the deadline, while others only exist for the purpose of writing up and delivering.

The microblogging platform Twitter is subject of the paper "@twitter Try out #Grabeeter to Export, Archive and Search your Tweets" by the authors Muehlburger, Ebner, and Taraghi. Starting with the problem that Twitter streams usually are not available anymore after an event, they propose a solution in the form of an application called Grabeeter, which stores the tweets locally, allowing analysing the tweets also after the event. They discuss the architecture of the application client and server aspects and they focus specifically on how to use the system for conducting research.

The paper "Connecting Early Career Researchers: Investigating the Needs of Ph.D. Candidates in TELWorking with Web 2.0" from Heinze, Joubert, and Gillet, reports on a case study about the needs of young TEL researchers. The authors asked 21 doctoral candidates and three senior researchers about how they would wish to receive support for their doctoral work: regarding personal support, awareness support, and tools for collaboration. The three major findings were that first, it is unlikely that even a larger community of practice can survive on its own; second, a community of practice is highly dependent on individuals dedicated to it; and third, tools or services should mainly support collaboration and communication.

We want to use this opportunity to thank the authors for their contributions. The work in organising the workshop and producing these proceedings has been financially supported by the European Union under the ICT programme of the 7th Framework Programme in the project STELLAR.

October 2010

Erik Duval, Thomas Daniel Ullmann
Fridolin Wild, Stefanie Lindstaedt
Peter Scott

Organizing Committee

Erik Duval, Katholieke Universiteit Leuven, Belgium
Stefanie Lindstaedt, Know-Center Graz, Austria
Peter Scott, The Open University, United Kingdom
Thomas Daniel Ullmann, The Open University, United Kingdom
Fridolin Wild, The Open University, United Kingdom

Program Committee

Xavier Ochoa, Escuela Superior Politecnica del Litoral (ESPOL) at Guayaquil, Ecuador
Wolfgang Reinhardt, University of Paderborn, Germany
Nina Heinze, Knowledge Media Research Center Tuebingen, Germany
Peter Kraker, Know-Center Graz, Austria
Frederik G. Pferdt, University of Paderborn, Germany
Johannes Metscher, University of Augsburg, Germany
Andreas S. Rath, Know-Center Graz, Austria

Contents

Feeding TEL: Building an Ecosystem Around BuRST to Convey Publication Meta-data <i>Peter Kraker, Angela Fessl, Patrick Hoefler and Stefanie Lindstaedt</i>	8
Filling the Gaps to Know More! About a Researcher <i>Gonzalo Parra and Erik Duval</i>	18
Research 2.0: Drawing on the Wisdom of the Crowds to Develop a Research Vision <i>Marie Joubert and Rosamund Sutherland</i>	24
Research at the Table <i>Bram Vandeputte and Erik Duval</i>	38
Visualizing the Origins and Connections of Institutions based on Co-authorship of Publications <i>Till Nagel and Erik Duval</i>	48
Tools to Find Connections Between Researchers - Findings from Preliminary Work with a Prototype as Part of a University Virtual Research Environment <i>Jim Hensman, Dimoklis Despotakis, Ajdin Brandic and Vania Dimitrova</i>	54
The Afterlife of "Living Deliverables": Angels or Zombies? <i>Fridolin Wild and Thomas D. Ullmann</i>	66
@twitter Try out #Grabeeter to Export, Archive and Search Your Tweets <i>Herbert Muehlburger, Martin Ebner and Behnam Taraghi</i>	76
Connecting Early Career Researchers: Investigating the Needs of Ph.D. Candidates in TEL Working with Web 2.0 <i>Nina Heinze, Marie Joubert and Denis Gillet</i>	86