



EAPRIL Best Research and Practice Award

GENERAL PROJECT INFORMATION

1. Title of project

Hybrid learning environments in vocational education

2. Participants of the project (full names and position) (please indicate the main applicant/contact person)

Ilya Zitter, Senior researcher, Centre for Expertise in Vocational Education (ecbo) and Training - main applicant/contact person. This application is from two joined projects: a design-oriented research project from the Centre for Expertise in Vocational Education (ecbo-project) and an educational innovation/practitioner-research project (hpbo-project). A PhD-research project is closely related. The core members of the above projects are (in alphabetic order): Erica Aalsma: Innovation manager and director of The Leermeesters, Peter Baselaar: Project leader hpbo-project Koning Willem I College, José van den Berg: Program manager Centre for Expertise in Vocational Education, Elly de Bruijn: professor University of Applied Sciences Utrecht/Utrecht University, Henriët Buikema: Project leader Alfa-college, Hans Drijfhout: Manager Stork Technical Services (now Manager NHL University of Applied Sciences), Eddy Hekman: Practitioner-researcher Hanze University of Applied Sciences, Wenja Heusdens: Practitioner-PhD-researcher Applied Sciences Utrecht/Utrecht University, Frans Hoetink: Project leader hpbo-project Hanze University of Applied Sciences, Aimée Hoeve: Researcher Centre for Expertise in Vocational Education, Twan Musters: Practitioner-researcher Koning Willem I College, Paul Swinkels: Practitioner-researcher Koning Willem I College, Reinier Veenhoff: Accountmanager Strukton Worksphere (now Facility manager Alfa-college).

1. Articulation and impact of the project in the field. How is the project responding to a real need in the field?(maximum 500 words)

Hybrid forms of learning environments in vocational education are central to the two projects of this application: a design-oriented, applied research project from the Centre for Expertise in Vocational Education (ecbo-project) and an educational innovation/practitioner-research project (hpbo-project). A PhD-research project is closely related.

‘Over the last decade, school-based learning has become more informal with forms introduced such as authentic assignments, project-based learning, and in-school mini-enterprises. At the same time, informal learning was formalised by means of recognition of prior learning and the use of portfolios (Tynjälä, 2008). This has led to a process of cross-fertilization leading to new forms of learning that integrate aspects of both formal and informal learning. Our focus is on the latter, hybrid forms of learning that aim to interweave learning and working processes to benefit from the strengths of both formal, school-based learning and real-life experience.’ (...) The above research moves from formal, school-based learning processes in the direction of learning in the workplace. The movement the other way is also becoming more and more widespread (...) Fuller and Unwin (2004) advise to move forward to expansive workplaces in which learning is regarded as part of work and supported by appropriate supervisory and managerial processes. (...) A core problem underlying the emergence of hybrid forms of learning environments is the complex and problematic nature of the transition learners are required to make from education to the workplace (Tynjälä et al., 2003). Studies show a gap between what is learned and what is required of competent professionals in an ever more complex world (Baartman and De Bruijn, 2011).’ (Zitter & Hoeve, 2012).

A field study (Huisman, De Bruijn, Baartman, Zitter & Aalsma, 2010) uncovered a variety of forms of hybrid learning environments already present in Dutch vocational education. On the basis of the exploratory field study, the collaborative partners of the joined projects were found. The joined projects are carried out on the basis of different types of subsidies. The granting of these subsidies was subject to presenting project and research proposals to evaluation committees combining representatives of vocational education, educational science, policy makers and trade & industry. The approval of committees that explicitly included representatives of the field, also showcases that the joined projects respond to a real need in the field of vocational education.

These different partners of the joined projects signed up because they embrace the dual goals of the projects: educational innovation combined with practice-based research. The practice-based research in these projects is multi-faceted and consists of the following types: systematic reflection by practitioners, localized research by practitioners-researchers, design-based, applied research by scientific researchers and Phd-research by a practitioner-researcher.

2. What type of network did you establish? How strong is your network and how well did it work?

Circulating the insights and knowledge developed in the joined projects, even while we are still developing, is fundamental in our view. The participants of the projects themselves form the core of the network and could be considered as a ‘community of practice’. From this core, we established a wider network. Besides, we try to make structural links to other communities of practice or other networks. Below, we list a number of examples, of both Dutch and international networks:

- ‘Team knowledge’ consists of the practitioner-researchers, practitioner-PhD-researcher and researchers of the Centre for Expertise in Vocational Education.

- The Thinktank consist of, a business representative, an educational manager, a policy maker, an innovation manager, an educational specialist, a professor university/university of applied sciences and a senior researcher.
- There is a linking pin with the Design Science Research Group, an established community of practice (since 2006 with monthly meetings). www.dsrg.nl
- On the basis of a presentation at 2nd International workshop on Curriculum Innovation and Reform: An inclusive view to curriculum change of the Cedefop (<http://www.cedefop.europa.eu/en/events/17427.aspx>), the OECD Innovative Learning Environments project invited us to write a paper on hybrid learning environments (<http://www.oecd.org/edu/learningenvironments>). We were also invited to one of the working meetings of the project at the headquarters in Paris.
- The related PhD-project has a broad supervisory board consisting of two educational professors and an assistant professor, an educational manager and a senior researcher of the Centre for Expertise in Vocational Education.
- The relationship management system contains over 130 names and relations that applied to be on this list or visited one of our presentations, workshops or events. These relations include practitioners, educational innovators, educational consultants, teacher-educators, policy makers, managers, business representatives, practitioner-researchers, researchers.
- We organised two successful, interactive events for our own network: 1-12-2011 (150 visitors) and 31-5-2012 (100 visitors).
- The College of Cape Town in South Africa is a sister-school of one of the participating educational institutes. After their visit, they adopted the concept of 'hybrid learning environments' for the redesign of their own curriculum and share their insights and experiences in local networks, such as the 'Tourism Educators of South Africa'.
- We were invited to present at the national working party of career development counselling.
- A number of the research fellows of the national research group 'Vocational Education' organised by the Utrecht University of Applied science are part of the core members of the joined projects.

3. What is the collective and/or shared development of researchers and practitioners involved in this project?

- The following types of results are developed in the joined projects:
- Designs of hybrid learning environments
- Thick descriptions of the designs and the learning environments in-action
- Design propositions to design hybrid learning environments in vocational education

To make the above designs, thick descriptions and design propositions, a number of design models developed in preceding PhD-research in higher professional education were validated and made applicable to the context of senior secondary vocational education.

- Thick descriptions of the design process
- Thick descriptions of the multi-faceted practice-based research

To make the above process descriptions, a descriptive framework from Design Science Research was adopted and made applicable.

4. Degree of dissemination: what type of products did the project has as output, e.g. publications, tools, websites, presentations, ... (maximum 400 words)

In the joined projects, we strive for a variety of output, namely, contributions to the educational community, the researcher-practitioner community and the research community. We also aim for a variety of output: journal publications, paper publications, website, use of film, workshops and presentations. Below, we provide examples of each category to stay within the allowed number of words:

Journal publications:

Zitter, I., De Bruijn, E., Simons, P.R.J. & Ten Cate, Th. J. (2012). The role of professional objects in technology-enhanced learning environments in higher education. *Interactive Learning Environments*, 20(2), 119-140.

International publications:

Zitter, I. and A. Hoeve (2012), "Hybrid Learning Environments: Merging Learning and Work Processes to Facilitate Knowledge Integration and Transitions", *OECD Education Working Papers*, No. 81, OECD Publishing.

Book chapters (Dutch):

Zitter, I. 'Linking the knowledge and practice process' (De koppeling tussen kennis- en praktijkstroom). In: J.E. Van Aken & D. Andriessen (Red.). *Handboek ontwerpgericht wetenschappelijk onderzoek. Wetenschap met effect*. Boom|Lemma, Den Haag.

Trade publications (Dutch):

Aalsma, E. m.m.v. Raaijmakers, M., Zitter, I. & Hoeve, A. (2011). De omgekeerde leerweg: consequent perspectief op de beroepspraktijk. *Profiel 11*, 14-17.

Workshops/Presentations:

March 2011 Co-organisation work conference 'Practice-based research to support educational innovation projects' (Innovatieondersteunend onderzoek).

June 2010 & 2011 Symposia Onderwijs Research Dagen (ORD) conferences 2010, 2011.

November 2011 Hoeve, A. & Zitter, I. A design perspective on the integration of working and learning (2011). Workshop EAPRIL, Nijmegen, The Netherlands.

2011/2012 Invited workshops/presentations at educational institutes.

2011/2012 Guest lectures at universities (students educational science)

2012 Invitation as 'best practice of innovative development in vocational e.ducation' of the European Social Fund (ESF)-project KOMMA of the DBO (Vocational Training Service), an agency of the Belgian Department of Education and Training.

2010-now Variety of workshops and tools to support the (re)design of hybrid forms of learning environments and carry out the combined systematic reflection and practitioner-research.

Different media (e.g. websites, film):

Fold-out businesscard size publication to use as conversation trigger.

www.kennisinontwikkeling.nl a website to formalize the process of sharing work-in-progress.

Weblog on 'Community New Vocational Education' (Het Nieuwe Beroepsonderwijs).

Short stories and portraits of participants (film) to share the insiders perspective.

5. What is the sustainability of these products?

Sustainability of the results, both the educational innovation and the practice-based research results, is that through the process of co-creation, the rich expertise of practitioners is harvested and made more broadly available. The involved practitioners are enticed to reflect systematically and the practitioner-researchers develop localized insights and knowledge. Besides, the educational innovation process is enriched with scientific insights and models, with the aim of designing and developing educational innovations that are not only based on solid, systematic local expertise, but also based on scientific insights.

While the educational innovation and practice-based research takes place, we circulate the work in progress with the outside world through our network and links with communities of practice. We explicitly use these interactions to validate the intermediary results and gather input for improvement.

It should be noted that all the participating institutes and organisations were already working on the central theme in their own ways, in the joined projects, different strands have been combined into a new whole. The participants also understand, both on a personal and an organisational level, that innovation and research processes like this take time. They understand that they will have to hold out for a long time and are willing to invest and take ownership to succeed in the long run.

6. Motivation: Why does your project deserve to win the EAPRIL Best Research and Practice Award (maximum 400 words)

The joined projects and the related PhD-project have been long in the making. Different persons and organisations worked towards these projects for a sustained period of time. After the preliminary field study, the timing finally came together and the joined projects could start. The projects acquired their own budgets, from different subsidy sources.

In this project, many established boundaries are crossed: the boundary between research and practice, the boundaries between applied research and PhD-research, the boundary between educational institutes and business, the boundaries between different types of organisations, the boundary between higher professional education and senior secondary vocational education, the boundary between the north of the Netherlands and the south the Netherlands. All the participants come from different worlds and bring their own goals, their own language, their own instruments, their own cultures. Also, the world outside of our multi-cultural, joined projects is often sceptical and wonders how effective the whole endeavour is. Sustained collaboration across these boundaries is a challenging process. Our shared dual goal of improving educational practice in combination with relevant practice-based research is the driving force to keep the process going, no matter what.

To be nominated, or perhaps win the EAPRIL Best Research and Practice Award, would first of all validate our joined efforts to many external stakeholders, evaluators and followers in general. More importantly, the explicit commendation would certainly encourage all of the hard-working participants to keep up their good work.

7. Describe, in three bullet points, the lessons learned during the course of the project you would like to share with the EAPRIL community.

- Aligning different types of knowledge creation: systematic reflection by practitioners, practitioner-research, design-based applied research, PhD-research.
- Process of co-creation and sustained collaboration across different types of organisations in projects with dual goals (educational innovation and practice-based research).
- Knowledge circulation while developing, for a broad target audience/potential users.