Research on Personal Learning Environments (PLEs) is relatively new, compared to other fields there are limited publications and conferences, despite growing interest in research in this area.

This special issue of the *International Journal of Virtual and Personal Learning Environments* is based on papers presented at the first face-to-face PLE Conference, held in July 2010 in Barcelona. The purpose of The PLE Conference 2010 was to provide a space where researchers could exchange ideas, experience and research around the development and implementation of PLEs – including the design of environments and the sociological and educational issues that they raise. The conference was highly successful in terms of attendance and participation and it also had a strong online presence, with sessions being streamed, an ongoing “conversation” on Twitter, and numerous blog posts by participants. Opportunities for discussion and dialogue were enhanced by the ‘unconference’ approach to the conference organisation and a number of participants took the opportunity to carry out surveys and interviews related to their specific research.

The papers, demonstrations, workshops, Pecha Kucha sessions and posters presented reflect a diversity of approaches to research and development of PLEs in different contexts and domains, including formal institutional based learning, informal learning, and learning in the workplace. One session was given over to an exploration of the concept of PLEs as such.

This papers included in this journal issue reflect the different approaches to PLEs and PLE research presented at the conference ranging from pedagogic theory to practical applications. They also reflect the growing interest in the potential of ubiquitous computing, social software and mobile devices to support Personal Learning Environments.

The first paper, “*Personal Learning Environments: Concept or Technology?*”, by Sebastian Fiedler and Terje Väljataga, explores the definition of PLEs, by reviewing and critiquing how the notion of PLEs has been conceptualised and discussed in research literature. They suggest that the variability of interpretations and conceptualisations of PLE express a fundamental contradiction between patterns of activity and digital instrumentation in formal education on one hand and individual experimentation and experience within the digital realm on the other. The paper argues against the prevalent tendency to base the conceptualisation of PLEs almost exclusively on
current or emerging Web technologies, while underlying patterns of control and responsibility often remain unchanged. They propose instead to scrutinise these patterns and to focus educational development on supporting adult learners to model their learning activities and potential (personal learning) environments while exploring the digital realm.

In their paper “Factors Affecting the Design and Development of a Personal Learning Environment: Research on Super-users”, Helene Fournier and Rita Kop discuss the results of the first phase of an ongoing research project on PLEs. The project aims to identify what potential users would consider to be important components, applications and tools in a PLE. The methodology included surveying ‘super-users’ - individuals who use advanced Internet tools and technologies in an educational environment - in their use of existing tools, applications and systems and their preferences in learning, in order to develop a PLE specification that potential learners will find useful and empowering in their learning. The research suggested human factors and attitudes affecting technology use and uptake, important for interface design that needs to be factored in the design and development of a PLE.

In the third paper in this issue, “Making it Rich and Personal: Crafting an Institutional Personal Learning Environment”, Su White and Hugh Davis present a case study of the institutional processes harnessed to establish a personal learning environment for all students at the University of Southampton. They report on the challenges encountered, which went beyond simple implementation. As well as deploying technology ‘fit for purpose’ the project aimed to create an environment that could play an integral and catalytic part in the university’s role of enabling transformative education.

In the paper “Personal Smartphones in Primary School: Devices for a PLE?” Beat Döbeli Honegger and Christian Neff describe the goals and initial results of an ongoing two-year case study in a primary school class where the teacher and all of the students were provided with a personal smart-phone. Students are provided with free phone and internet services and take their smartphones home after school, providing them with access, anytime and anywhere, to an internet-connected computing device which can be used for reading, writing, calculating, drawing, taking photos, listening to or recording audio and communicating. The paper describes the planning and introductory phase of the project as well as early best practice examples of using personal smart-phones, in and out of school, after five months of use.

The paper “My Personal Mobile Language Learning Environment: An Exploration and Classification of Language Learning Possibilities Using the iPhone”, by Maria Perifanou is an exploration and classification of language learning possibilities using the iPhone. Maria Perifanou explores the possibilities of iPhone for language learners and develops a classification of different applications, including those developed specifically for Language Learning, and other applications that, even though not created for such a purpose, can be used in Language Learning. The aim of the classification is to assist learners and teachers in utilising the new language learning possibilities offered by smart-phones. The use of such devices, the author claims, can transform the traditional learning process by facilitating autonomous and self-directed learning processes without limits of time and space. The paper concludes by presenting a number of practical, personal language learning scenarios trialed for learning Italian language and reflects on the potential of developing a Personal Mobile Language Learning Environment.

A number of common themes run though the different papers, reflecting recurrent themes at the PLE conference.

There is no single definition of PLEs but rather a number of prevalent themes and issues. For as long as the PLE term has been used, there has been a long-running debate over its meaning, and a number of other similar or related ideas and terms have been proposed, either as a complement or extension of the idea of the PLE including Personal Learning Networks and Personal Learning Pathways. Furthermore
there are some inherent tensions between the
idea of the PLE as a technological development
as opposed to a pedagogic and social approach
to learning. It is also evident that the debate is
no longer restricted to PLEs as an object or
even PLEs as concept, but also encompasses
institutional PLEs, shared PLEs and a number
of other approaches.

There is an ongoing debate over the role
of institutions with regard to PLEs. Some have
questioned institutional control asking whether
it is possible for institutions to drive innova-
tion through the development and provision of
PLEs. Can an institution drive something that
is so patently ‘personal’? And, perhaps more
importantly, should they do it?

Research into PLEs has raised the question
of the relation between technology, innovation
and change. New technologies have been the
source of disruptive innovation and change. Is
the educational world ready for this, and able
to adapt to change? Education is seen as hav-
ing been slow to adapt to technological and
social change with curriculum and programme
changes lagging in implementation.

PLE development has highlighted the issue
of learning in wider social environments outside
the institution. Society is finding and adopting
new ways and channels for communication:
on the go, mobile, always changing; it is also
rediscovering collaboration and co-creation of
content and information. Barriers such as time
and space become blurred, including the walls
of educational institutions, and lifelong learning
takes on a new dimension, life-wide learning.

PLE research has highlighted the issue of
pedagogic change including autonomy, motiva-
tion, self-directed learning, and the changing
role of teachers. Some commentators have
pointed to the need for new pedagogic ap-
proaches to supporting learners in developing
their Personal Learning Environment. Others
have suggested that teachers are reclaiming their
original roles: as motivators, guides, facilitators
of the learning process, and not just as living
repositories of information.

It has been suggested that PLEs can be
based on appropriating technologies and soft-
ware that have not been purpose developed
for education. As evidenced by practice, and
covered by such publications as the Horizon Re-
port, the adoption of technologies that were not
intended for education has become a common
occurrence. This can have a positive impact,
as learners make use of those technologies and
tools they feel more comfortable with, a step
toward the personalisation of learning. But on
the other hand, using applications not originally
designed for education raises a number of is-
issues including privacy and reliability and how
adequate are they for learning.

Some have questioned why it is taking so
long to implement PLEs in practice. Yet as this
short editorial indicates, the discussions around
PLEs raise fundamental issues over the purpose
and organisation of education and as to how
best harness rapidly developing technologies
to support learning. Research and develop-
ment in PLEs can make a major contribution
to such debates.

We would like to thank Michael Thomas,
the editor of the journal for his support and
patience, and the individual contributors for
their efforts.

Graham Attwell
Ricardo Torres Kompen
Guest Editors
IJVPLE
Graham Attwell is a researcher for the Welsh independent research organisation, Pontydysgu. His research interests include pedagogical approaches to the use of technology for teaching and learning and knowledge development and sharing. He has written and spoken on the development, pedagogy and social impact of Personal Learning Environments. Graham is a keen creator of social media including video and internet radio and publishes a popular edublog, the WalesWideWeb.

Ricardo Torres Kompen (Santiago de Chile, 1968) is a researcher in the field of technology enhanced learning and multimedia. He holds both a BSc (1991) and a MSc (2000) in Chemical Engineering, and has been working as a teacher in HE institutions since 1996, in the areas of Industrial, Petroleum and Organic Chemistry, and, since 2003, Business Information Systems. Currently enrolled in a Doctoral Programme in Multimedia Engineering at the Universitat Politècnica de Catalunya, his thesis is focused on the personalisation of learning through the use of multimedia and technology. He works as e-Learning cluster coordinator for Citilab, an open innovation foundation based in Cornellà-Barcelona, Spain. He collaborates with the Beyond Distance Research Alliance at the University of Leicester, UK, and was the local organizer for The PLE Conference 2010 (Barcelona, Spain) and is a member of the organising committee for The PLE Conference 2011 (Southampton, UK).