

Tenth Issue of the Journal of Problem Based Learning in Higher Education

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and Patrik Kristoffer Kjærdsdam Telléus **

INTRODUCTION

Dear Reader,

Welcome to the tenth issue of JPBLHE. Being the tenth issue marks a hallmark in the history of the journal. The journal is now consolidated, and we are proud of presenting this issue containing four research papers and five cases. Another hallmark is that we change editor-in-chief. Thomas Ryberg has been the editor-in-chief since the start of the journal and without his dedication, patience and insightful ability to set the course of the journal, we would not have been where we are today. We are sad to see him leave, but wish him all the best in his future endeavours. The editorial team wishes to thank him profoundly for all his hard work and for being such a great colleague. At the same time, we are thrilled to announce the new editor-in-chief, Patrik Kristoffer Kjærdsdam Telléus. We have known Patrik for a long time, and feel completely confident to put the leadership of JPBLHE in his hands. We look forward to what the future will bring. The readers can read special greetings from the two editor-in-chiefs below.

THE FOUR PAPERS

Author country	Education programme	Topic
Denmark	Humanities	Learning analytics and Problem-based learning
Turkey	Computer education and instructional technology	Web 2.0 Technologies
Denmark	Urban Planning	Action research in planning education
United States of America	Professional studies	Experiential Problem-based learning

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The issue contains four research papers and each of them presents examples of research that marks new directions in the development of PBL. Two papers (Kilińska, & Ryberg; Ünal) aim to study the new digital directions of PBL. The other two papers (Frandsen, & Andersen; Minor-Romanoff, Rae, & Zakrzewski) relate to new directions of PBL to cope with the increasing complexity of problem solving processes.

The first paper is written by two authors from Aalborg, Denmark (Kilińska, & Ryberg). The purpose of the paper is to investigate how the relatively new field of Learning analytics (LA) can potentially be used to support and inform PBL practice. The authors combine PBL and LA by identifying central themes of PBL and present examples of LA tools and concepts in connection to those themes. The authors conclude that automation of feedback and assessment provides an opportunity for employing PBL at a larger scale, not only in small classrooms, while preserving the main principles. For readers who want to combine LA and PBL, the paper furthermore presents an interesting discussion of the possibilities, challenges and implications of doing so.

The second paper is written by an author from Afyonkarahisar, Turkey (Ünal). The purpose of this paper is to present general trends with regard to Web 2.0 technologies supporting PBL environments. The trends are analysed in a systematic literature review of studies combining Web 2.0 and PBL. The paper concludes that the effectiveness of Web 2.0 technologies supporting PBL was the most frequently reported finding in the literature, whereas Wiki was the most preferred Web 2.0 tool utilised within the PBL environments. However, the literature also reported on the effects of Web 2.0 technologies supporting PBL concerning participants' skills and achievements. Finally, the paper points to potential further research to increase the scope of using Web 2.0 technologies in PBL environments.

The third research paper is written by two other authors from Roskilde, Denmark (Frandsen, & Andersen). The paper presents a synthesis of two cases from urban planning where PBL is related to an action research approach for sustainable transition. The educational design follows a model adapted by one of the authors showing the prototypical phases in community-based action research. This action research approach to PBL is applied in two cases in the planning domain. The first case considers a renewal project of a neighbourhood and the second a sustainable street transition, both in Copenhagen. Even though the cases have differences, the authors conclude that in both cases, the perspective of letting the student do action research strengthen their ability to master practical and ethical judgements in complex real-life learning processes.

The fourth research paper is written by three authors from New York, USA (Minor-Romanoff, Rae, & Zakrzewski). The paper describes an experiential problem-based multifaceted instruction design and teaching model applied at the New York University School of Professional studies. The model combines traditional instructional design, evidence-based

strategies and learning theories for critical thinking and transferable skills. The model includes applications and theoretical combination for an ill-structured problem-solving design and teaching model for an entire programme. The perspective is to equip students with complex problem-solving skills to increase their capabilities in industry and other professional contexts. The paper furthermore presents findings to clarify the preconditions and perspectives for bringing the model into practice to inspire readers of JPBLHE to follow a comparable path.

THE FIVE CASES

Author country	Education programme	Topic
Sweden	Environmental science	Supporting student's self-directed learning in PBL
United States of America	Teacher education	Digital problem-based learning in science methods courses
Denmark	Communication and Digital Media	Lessons learned from an educational design experiment
Taiwan	Adult learners in vocational higher education	PBL for soft skills training
Argentina and Spain	Social Communication	PBL for teaching transmedia communication

This issue contains five cases. Although the cases are quite different in origin (country, student level), they are also quite connected. The three first cases (Johansson, & Svensson; Rillero, & Chen; & Davidsen, Andersen, & Christiansen) are focused around how students by themselves work in PBL and how the teachers can help them while maintaining the students' autonomous work. The two latter cases (Lee; & Bron, & Barrio) are focused on how PBL helps developing soft skills and life-long learning skills.

The first case is written by two authors from Karlstad and Linköping, Sweden (Johansson, & Svensson), and the focus is on how university students work between supervision meetings. Studies show that some students unfortunately do not spend enough time self-studying during this phase, wherefore Linköping University implemented a new instrument, an Individual reflection paper (IRP) to support the learning process between the supervision meetings. The paper shows how the students experienced working with IRP and how it influenced their learning process. Results show that a majority (90%) of the students found that IRP supported their work, particularly students in the beginning of their studies. They particularly found that the tool supported better discussions and gave all students the opportunity to show participation.

The second case is written by two authors from Arizona, USA (Rillero, & Chen), and the focus is on teacher education in PBL for K-12 (grades 1-12). The outset of the paper is that PBL implementation requires different teacher roles than teacher-centred instruction and the paper describes the use of a PBL module in a science methods course and how the preservice teachers

experienced the module. The students were English Language Learners, who face additional obstacles to learning than other students. The paper described that it is a particularly challenge to find the balance between support for students and the autonomous work of the students. The module is described and evaluated through both quantitative and qualitative methods, and findings showed that the teacher candidates generally had positive attitudes about the module.

The third case is written by three authors from Aalborg, Denmark (Davidsen, Andersen, & Christiansen), and the focus is on an experiment with university students to promote interaction and knowledge sharing in the groups. The paper focuses on a PBL course that introduces new students to the core principles of PBL. The experiment had the purpose of making the work of each of the groups publicly available to the entire semester class for inspiration and criticism. A PBL Box full of tangible materials was therefore introduced. One of the lessons learned was that educational designs are difficult to implement in practice if it is not mandatory for the students, teachers, and supervisors. The paper concluded by offering suggestions on how to improve the use of a PBL Box.

The fourth case is written by one author from Taipei, Taiwan (Lee), and the focus is on adult learners in vocational higher education. Students in Taiwan do not usually learn group learning skills in junior or senior high school education. The Taiwan Ministry of Education, therefore, initiated a programme aimed at encouraging the Institutions of Technology to adopt PBL for soft skills training. These skills are developed as part of a PBL course, and they are described and reflected upon in this paper. One issue raised in the paper is the importance of scaffolding strategies in PBL, especially for low achievers or PBL novices.

The fifth case is written by two authors from La Rioja, Argentina and Madrid, Spain, respectively (Bron, & Barrio), and the focus is on last year university students. Here, PBL was implemented in a course in Multimedia Communication as “learning to learn” to support the development of life-long learning skills which are essential to develop in an area that is constantly changing. The course involved that students should tell a story through the use of different media and the project evolved around how it was possible to make the life of a historical figure known in an innovative and creative way. One of the results reported was that students learned different techniques for working collaboratively.

GREETINGS FROM OUTGOING EDITOR-IN-CHIEF: THOMAS RYBERG

I have been editor-in-chief for the International Journal of Problem Based Learning in Higher Education (JPBLHE) since the inaugural issue in 2013. This has been a most rewarding, but also difficult task. Setting up a new interdisciplinary journal is academically rewarding and interesting. Discussing scope, aims and how the journal fits into the wider scholarly landscape

has been done in collaboration with the editorial board and the editorial team, and I am thankful to all the people in the boards for their engagement with the journal over the years. Also, although a trivial point, a journal cannot sustain without authors and readers, so I would like to thank all readers, but in particular the authors who with their paper, reviews and cases have contributed to shaping the journal, but moreso the scholarly landscape of Problem Based Learning. I am happy with what we have accomplished over the years, and I think for the journal to further develop and embrace new ideas, formats and networks it is important that new people come in and start shaping the journal. Therefore I am very happy that Patrik Kristoffer Kjærdsdam Telléus has decided to pick up the role of editor-in-chief and I am looking forward to working with Patrik in the transition of editorship. I will of course remain a reader of and contributor to the journal.

GREETINGS FROM INCOMING EDITOR-IN-CHIEF: PATRIK KRISTOFFER KJÆRSDAM TELLÉUS

I am Patrik Kjærdsdam Telléus and in January 2020, I start as editor-in-chief for the International Journal of Problem Based Learning in Higher Education. First, I would like to thank Thomas Ryberg for his wonderful work and his commitment to the journal. Under his wings' the journal has developed into a thorough and insightful journal honoring academic standards and research quality. It is a great honor to try to pick up from where Thomas has left off. I'm looking forward to work closely with the editorial team and the editorial board ensuring that our journal is continuously regarded as one of the most essential journals for PBL research, and that it remains attractive for a diversity of scholars and laymen interested in the field of higher education. It is a huge privilege to steer this journal into the coming decade, where meticulous academic effort and research integrity are virtues that we need to treasure and protect, to ensure that the knowledge and the guidance that our journal provide is a solid and meaningful counterpart to dogmatic or affected oversimplifications, quick-fixies and opinion-makers. A scholarly journal is an opportunity for researchers to fight ignorance and arrogance, not merely amongst themselves, but as tendencies in the society in which they take part. As Emerson put it: "The office of the scholar is to cheer, to raise, and to guide men by showing them facts amidst appearances." To this call, the journal and I will gladly commit.

THANKS TO REVIEWERS

Finally, we should like to thank all the reviewers who have contributed to the improvement of the papers and cases published in 2019:

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