

Creative Construction Conference 2017, CCC 2017, 19-22 June 2017, Primosten, Croatia

Distance Learning within Management in Construction – Polish, Norwegian and Icelandic Experiences in Blended Learning

Aleksander K. Nicał*, Mariola Książek, Paweł Nowak, Jerzy Rosłon, Andrzej Foremny

Warsaw University of Technology, Al. Armii Ludowej 16, 00-637 Warsaw, Poland

Abstract

This paper presents the project which created two innovative courses organized in e-learning and blended learning concept of teaching: “Value Management in Construction” and “Risk Management in Construction”. The need of education in the area was confirmed in the numerous research works and contacts with Polish and European construction companies, realized within the Leonardo da Vinci Programme and were also agreed with Icelandic and Norwegian Partners, who were planning to introduce the prepared courses to their teaching programmes. Operational goal of the project was to facilitate qualifications of construction personnel managing construction infrastructure projects financed by European Union. Detailed goal of the project was preparation of the Value and Risk Management in Construction courses together with didactical materials and methodology at internet platform Moodle, both in Polish and English. Partners in the project were: Warsaw University of Technology (WUT), Norwegian University of Science and Technology (NTNU), Polish Association of Building Managers (PABM) and University of Reykjavik (UR). Main beneficiaries are construction companies personnel and students. Project was realized within 24 months (from April 2014 to March 2016).

© 2017 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Peer-review under responsibility of the scientific committee of the Creative Construction Conference 2017

Keywords: innovation, blended learning, value management, risk management, internet platform;

* Corresponding author. Tel.: +48-22-234-57-49; fax: +48-22-825-74-15.
E-mail address: a.nical@il.pw.edu.pl

1. Introduction

Warsaw University of Technology has gathered lots of experience in implementing e-learning and blended learning to construction over the last 8 years [1-5]. Beneficiaries of the project under title “Distance Learning within Management in Construction” were as follows: small and medium construction companies personnel (but also personnel from large companies), participating in construction infrastructure projects financed by EU, personnel of central and local administration supervising construction projects. Blended learning courses were prepared at EU level, as modern teaching method for construction managers, who got limited time for education. Need for continuous education of construction engineers and managers was confirmed in the LdV project and by contacts with construction companies from Poland and European Union. The project has:

- increased multi-cultural exchange,
- increased recognition of social aspects in Partners countries,
- facilitated mutual integration and opinions exchange, not only related to the technical aspects of construction but also in respect to the social sphere [6].

This paper brings the novelty to the current body of knowledge by describing the project that has created and implemented courses in the area of Value Management and Risk Management in Construction at Moodle platform.

2. Definitions and uses of blended learning

2.1. Overview

The literature review has demonstrated the difficulty that others have had in reaching a consensus around the definition of e-learning and blended learning. The lack of definition allows institutions to adapt and use the term as considered useful, and to develop ownership of it. Eight dimensions define the possibilities of e-learning and blended learning:

- delivery - different modes (face-to-face and distance education);
- technology mixtures of many (mainly web based) technologies;
- chronology - synchronous and a-synchronous interventions;
- locus practice-based vs. class-room based learning;
- roles - multi-disciplinary or professional groupings;
- pedagogy - different pedagogical approaches;
- focus acknowledging different aims;
- direction instructor-directed vs. autonomous or learner-directed learning [6].

The following are the characterizations for blended learning as it is practiced today:

- The provision of supplementary resources for learning programmes that are conducted mainly in the traditional way, through institutionally supported virtual learning environments;
- Transformative course level practices underpinned by radical course designs which often make significant use of technology to replace other modes of teaching and learning.
- A holistic view of technology and learning, including the use of the learners’ own technologies to support their learning [6].

2.2. Use of the term “blended learning”

To date, the differences and similarities between online, traditional distance and face – to- face traditional teaching have been little understood, leading to confused notions of “blend” [7]. Through the 1990s the corporate training world spoke of blended learning as enhancements to the typical corporate training intervention: the short course. Corporate researchers and practitioners noted that technology enhanced learning alone was not enough, arguing that people needed experiential learning for the mastery and retention of knowledge and skills achieved through the blending of technology and face-to-face interaction [8]. In the last few years, short courses were blended, also in the construction industry [9], with pre-course readings and post course activities such as action-

Download English Version:

<https://daneshyari.com/en/article/5026976>

Download Persian Version:

<https://daneshyari.com/article/5026976>

[Daneshyari.com](https://daneshyari.com)