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Challenges in Designing e-Learning for Educators With Limited Time and Access

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Abstract: This project aims to develop three e-learning courses, each containing six modules concerning early childhood education and care (ECEC). Each of the modules is designed to be completed in small gaps of time by educators, who have limited access to computers in their daily practice. This is one of the challenges in designing materials for educators in this area. Another challenge that also needs to be addressed when developing a learning design framework and producing modules is the diversity of educational provision across countries. Preliminary findings have revealed challenges in the academic process of condensing and re-mediating theoretical work on Child-centeredness in ECEC settings into meaningful online modules for practitioners. Difficulties can also arise when attempting to ensure coherence and progression between online modules that have been created by different partners. This presentation will emphasize how the project is developing manageable online courses for ECEC educators, which can be, completed in short spaces of time in their daily practice. Based on the experiences of re-mediating theoretical texts in multimodal formats, this paper and poster seek to encourage interest in the design process of online courses.

Keywords: learning design, online learning, practice development, skills development, early childhood education

1. Introduction

Developing relevant and applicable online courses for educators working in early childhood education and care (ECEC) settings is not a straightforward process. When designing for educators in ECEC settings such as kindergartens and pre-schools across different European countries, it is important to be aware of the diversity between practices. Although there are common characteristics between daily structured and non-structured activities, differences are found in the prioritisation of early learning, learning objectives, academic subjects, activities and free-play. How might one design for this diversity? Furthermore, when designing online learning for educators to access in their professional environment, challenges like limited time and access to computers need careful consideration.

The Research Centre for Learning and Digital Technologies at VIA University College has participated in the Erasmus+ project "Interpreting Child-Centredness to support Quality and Diversity in Early Childhood Education and Care". The project is in collaboration with partners from UK, Croatia, Ireland, Spain, and Italy. The project aims to support the development of the educators’ professional and technological competencies. This by designing and developing three online courses as illustrated in Figure 1.

Researchers from VIA have developed one of the courses, with Spain and Italy developing the other two courses and UK developing the general introduction to all three courses. Furthermore, VIA has also been responsible for designing and conducting workshops structuring the development of the three online courses. In the workshop participants were encouraged to consider ‘how might continuing education for ECEC educators be supported by the use of technology’? Inspired by Learning Design (LD) methods, an overall LD framework for online courses was developed to extend educators’ understanding of the competences required for Child-centred practice in ECEC settings.

The project also need to consider the educators’ mind-set, which was likely to be based on ‘traditional’ ways and understanding of participating in further education - traditional in the sense that educators enter a course at an educational institution located away from their professional environment. An online course will, however, move education into the educator’s professional environment, with the objective of bridging the gap between theory and the educational context.

The intention is to bring new perspectives into play; the design should provide a variety of online resources to support educators’ reflections and interpretation of their ECEC setting. The learning objectives should therefore
build on collaboration among professionals, promote self-reflection and accommodate further interest in trying out new perspectives. This tension between these two ways of being becomes relevant to the LD and makes it interesting to investigate.

Figure 1: The three courses and the modules within each course

2. Theory

Project team members from VIA conducted a workshop based on a LD methodological approach as part of a partner meeting. Present were the developers and the content providers. One of the LD approaches is based on Conole’s definition of LD as a process when designing for learning (Conole, 2013, p. 7) and her LD taxonomy defining the distinction between a learning unit and LD (Conole, 2007). Mor and Craft (2013) define LD as a process: “Learning Design is the act of devising new practices, plans of activity, resources and tools aimed at achieving particular educational aims in a given situation” (Mor et al., 2013, p. 86).

The design-based approach inspired by Conole’s 7Cs of LD supports participants in discussing and conceptualizing the overall LD of the three courses. Furthermore the Collaborative e-Learning Design method (CoED) motivated a collaborative approach and three phases 1) a common foundation, 2) discussion of pedagogical values, and 3) making a LD (Georgsen and Nyvang, 2007). When adopting LD methods, collaborative aspects are especially important in the design process; these enable diverse perspectives on the LD by inviting negotiations of meaning (Wenger, 1998).

3. Method

Based on LD methodologies and the phases of the CoED method, the facilitated workshop initiated a design process involving e-learning designers and researchers. Through a collaborative and visual process, identification of learning outcomes and objectives for the courses took place. Different pedagogical approaches and values had to be managed in relation to concepts, words and translation, when designing for educators across a broad field of ECEC-settings. The workshop participants reflected and focused on general considerations in relation to subject matter, pedagogical theory and the overall design framework of the online course.

The workshop was divided into three phases:

First, the facilitator focused the LD process to support a common understanding of learning, together with an understanding of how the learning management system (LMS) can support learners.
Second, the overarching values and principles for the design were identified. Participants’ expectations were addressed through pedagogical and didactics challenges. The LD should support a broad field of ECEC practitioners and enhance the learner’s reflection on aspects of child-centered practice in their own ECEC-settings. The overall design therefore needed to frame and facilitate collaborative learning and reflection.

The third phase, the detailed design, is based on phase one and two. Subjects within each of the three courses were divided into six modules each (see Figure 1). The third phase also dealt with the overall design of the courses and modules storylines. In this phase, the participants were divided into three groups dealing with one course each.

**Figure 2**: Illustration of the work in the design workshop

Each group came up with different learning activities in the LD for the whole course and the individual modules. Based on the groups’ individual designs, a simple structural learning path was discussed and agreed upon. Each module should start with a few lines of introduction and clear objectives for the course in form of 1-3 Outcome/Learning goals. Next theoretical points had to be presented in videos with voiceovers, such as slide shows with narration, video presentations and footages from ECEC-settings. Short texts were created and pictures from ECEC-settings were selected. As part of the module, the learning content/objects should encourage participants to reflect on their own practices. Each module ends with some questions for further reflection and discussion in the local ECEC-setting.

4. **The e-learning course design – challenges and possibilities**

In the project, one challenge was to cooperate in developing three online courses across large geographical distances. Across European countries there are variants in patterns of professional development among ECEC staff (Jensen and Iannone, 2015). When using an online learning platform to overcome the challenges of distance and diversity, it becomes relevant to reflect on; how the online platform can do more than just serving as a digital storage of online resources, but offer future education that can be online accessed in the ECEC-settings. The importance of organizing an online course must be carefully considered (Conole, 2007; Salmon and Wright, 2014). Research points towards education of ECEC staff in ways that can benefit from focusing on the ability to use knowledge in practice, and not through training specific methods and programs (Jensen and Iannone, 2015).

Another challenge is time and online access. Each of the modules is therefore designed for educators to complete modules in small gaps of time and with only limited access to computers, which they experience in their daily practice. This is an important challenge to address, which was addressed by designing each module to take only 20 minutes to complete, and the whole course therefore taking only 2 hours to complete.

In the course ‘child-centred practice from an embodied perspective’ the 5 stage model (Salmon, 2003) is used to scaffold the transformation of the academics’ theoretical work into delivery of the individual modules. The course is designed, as a collaborative learning resource, based on LD methods that endeavour to harness a reflective design and taxonomy for the learner (Conole, 2007; Georgsen and Nyvang, 2007; Salmon, 2003). In Child-centered pedagogy values like free-play, Children’s opportunity to communicate and be included as
individuals are prominent (Warming, 2011). The project is focusing on creating a LD that frames and facilitates an open learning process through which participants can discuss and reflect on how they can enhance their child-centred practice from an embodied perspective. The design is aiming to facilitate a variety of communities of practice (Wenger, 1998) in integrating in local ECEC settings, and support the ongoing renewal of child-centered approaches and practice.

The project is working systematically with the development of the courses. Challenges have appeared continuously e.g.: How is learning handled in small gaps of time? How is traditional academic dissemination transformed into online elements? How can the details of theoretical perspectives remain when scientific articles are transformed into (for example) short videos? The development of the modules was undertaken in a close collaboration between researchers and online developers. Video productions were sharply framed, articles and text was edited. Conventional presentations in the classrooms were re-mediated and incorporated into quizzes, cases, and finally, tasks for reflections on practice were carefully described and framed by recommended time intervals. The individual modules take into account the insecure users’ access and use of the online material.

5. Conclusion

Our preliminary findings reveal challenges in framing and condensing theoretical work into meaningful online modules, as the project involved experienced and non-experienced online designers. Facilitation from learning designers intended to accommodate a clear and manageable framework. Strict framework and considered constraints in relation to the content elements contributed to academics’ focus on selecting and communicating content and creating consistency in online modules. The LD process ensured consistency through the process of developing the courses that accommodated limited time in the ECEC settings, as modules are to be completed in short time frames. Furthermore, the modules advise reflections and discussions among educators in their own professional environment. The process of transforming classroom education to online learning was accommodated with the use of a consistent learning design. The courses have been evaluated in a first iteration with educators, and this shows that the main difficulties lie in using the online platform, as it was in English; also, some participants insisted on certificates for the students to complete.

References