Cross-cultural adaptation and user-experience validation of the ACAD Toolkit

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Abstract

Design for learning involves the delicate interweaving of knowledge about learning and knowledge about design. This work is often carried out by heterogenous design teams in which members speak of and value different aspects of design, and different methods for evaluating these designs in use. The challenge of reconciling these often-competing demands is critical to the success of these teams. This short paper outlines work breaking new ground translating an educational design method, developed in English speaking contexts, for use in Spanish speaking contexts. Steeped in socio-cultural and socio-material awareness this project explores how the ACAD Toolkit—a set of tangible design related resources embodying networked learning ideals—shapes and is (re)shaped in and through the process of translation. Guided by two questions: (i) How can we explore the process of translating not only language but values and forms of practice? and (ii) How can the ACAD Toolkit be validated in new contexts? This qualitative study involves the thematic analysis of multimodal data including video and audio recordings, and artefacts produced during workshops. Our method builds on traditional cross-cultural processes of adaptation that involve adapting, expanding and splitting ideas and concepts in two stages: language translation and user-experience testing. Our analysis is, therefore, reported in two stages. In the first we explore the process of reaching agreement on a test set of translated resources, and in the second we explore how these resources are being enrolled in educational design work in new contexts. The newly translated resources have been tested in three workshops in two Spanish speaking educational settings (Spain and Argentina). After analysing the data from these workshops, the initial translation will be corrected, and instructions will be developed—in both languages—to improve future translations of the ACAD Toolkit and in its ongoing use in English contexts. These instructions and the processes through which they will be developed will produce potential research objects for future educational design research. This method, initially developed with educators in Australia and New Zealand, embodies the very heart of networked learning—the movement of people, objects, and ideas across contexts and time.

Keywords

Design for learning, learning design, design teams, cross-cultural

Introduction

Around the world, learning designers and educators are in need of new methods to support their work (Beetham, & Sharpe, 2019). Finding validated approaches that incorporate a deep understanding of learning in networked societies that are also capable of expanding the design repertoires of educational designers, is challenging (Bartolomé, Castañeda, & Adell, 2018; Yeoman, & Carvalho, 2019). This short paper details initial findings from a project involving the translation of a new method rooted in theories of networked learning and developed

in English speaking contexts (Carvalho & Yeoman, 2019), for use in Spanish speaking contexts. Our aims in doing so are threefold: to extend the reach of this new approach, to explore the process of translating not only language but values and forms of practice, and to contribute to the validation of the original method in new contexts.

The new method is an embodiment of the Activity Centred Analysis and Design framework (Goodyear & Carvalho, 2014). ACAD is an analytical tool designed to reveal the architecture of productive learning networks that acknowledges and accounts for the physical, social and epistemic situatedness of learning. As a result, it calls us to pay careful attention to designable aspects of three distinct dimensions of design (i) the set design, (ii) the social design and (iii) the epistemic design. When thinking about epistemic design we should focus on valuable things for learners to do, different ways of structuring knowledge, and how it is we come to know. When thinking about social design, we should focus on the specific nature of social arrangements including the formation of groups, the assignment of roles, and the division of labour. When thinking about set design, we should focus on material and digital elements, the points of connections and or transition between them, and their spatial and temporal distribution.

Building on the ACAD framework, Yeoman and Carvalho (2019) developed the ACAD Toolkit to support the work of heterogenous design teams. The ACAD Toolkit includes tangible elements such as the ACAD wireframe and cards, and assorted case studies, images, and stationery. The ACAD cards provide conversational prompts, such as collaborative learning studio, assigned mentor, or peer assessment. These terms help to initiate dialogue with specific reference to a carefully selected set of designable elements across the three dimensions of design. The ACAD cards reduce complexity by providing colour coded visual representations that can be shared and reconfigured, scaffolding design conversations that support the good alignment of the material, social, and conceptual structures of learning. In doing so, they help to shape designs that will indirectly influence the emergence of valued learning activity (Yeoman & Carvalho, 2019). These tangible tools provide support for educators increasingly being asked to think bigger, be more creative, and develop learning designs capable of preparing learners to solve the complex challenges of our times. All of which they must do while remaining true to the high-level philosophies of learning that underpin their teaching and learning practice.

Cross-cultural adaptation—The Spanish ACAD Toolkit

Using a qualitative design, this study combines multimodal elements and thematic analysis (Jewitt, 2009; Denzin & Lincoln, 2017). Data collected includes video and audio recordings, and artefacts produced during workshops. Audio translations have been completed to support analysis by all researchers. Informed by socio-material theories of learning (Fenwick, 2015; Sørensen, 2009) the process of translating and adapting the ACAD Toolkit involved paying close attention to the material, social, and conceptual structure of both the tangible resources and the new contexts in which they were intended to scaffold design for learning. Our motivation for creating the Spanish ACAD Toolkit was not merely to expand its reach, but to explore how the cultural adaptation of the material and conceptual elements supported adaption and enactment across a range of contexts. In doing so, we build on cross-cultural processes of adaptation (Beaton, Bombardier, Guillemin, & Ferraz, 2000; Guillemin, Bombardier, & Beaton, 1993) that focus on adapting, expanding and splitting ideas and concepts in two distinct stages or iterations.

First iteration: Language translation

Method and process
The first iteration of the Spanish ACAD Toolkit, to be tested in the second iteration, involves:

- translation (two different versions),
- unification,
- back-translation (two different versions), and
- expert committee unification.

Initial findings
We acknowledge the importance of understanding the context in which words are used and the valence of their meaning in particular settings, is not a new contribution to knowledge. However, the power of unspoken

assumptions to confound translation did provide new insight into the importance of understanding when the intentional use of standardised term was desirable, and when it was not. This was most evident when translating the terms for the set design cards (infrastructure, tools, and texts). Some of the original terms are derived from Australian higher educational standards. A case study lecture theatre is a room with 100 seats or less, arranged in a horseshoe shape, with a tiered floor, and teacher computing and audio-visual support to support small group discussion during lectures. In the Spanish speaking context, there was no equivalent room type or set of standards. But removing these terms from the deck highlighted another role they were playing. Some of these standardised terms had been recruited to support conversations about how the specific physical attributes of a case study lecture theatre would support an innovative pedagogical design, rather than what types of learning spaces would be necessary to enact a specific pedagogical practice. This was important because in many instances teams were not designing new learning spaces and new curricula in tandem, so the set design needed to be understood with reference to—or in support of—the design and not as the focus of design attention. Other set-design terms that presented challenges were those selected to be deliberately ambiguous, such as in-between, which had been included in the original deck to generate creative discussion precisely because they lacked clarity. Articulating this subtlety and finding terms that performed similar functions was challenging as many of these choices had evolved with the deck and had not been the function of an explicit strategy from the outset. As such, a key lesson learned in translation has been to identify and highlight the underlying significance of terms selected to reduce cognitive load or stimulate creative dialogue in one context, which may not translate well in another.

Second iteration: User-experience test

Method and process
This iteration involves evaluating the ACAD Toolkit using video-recorded workshops and participant interviews, in two Spanish speaking countries (Spain and Argentina), with three different target groups:

- experienced teachers working in primary and secondary settings,
- experienced learning designers working in tertiary settings, and
- novice learning designers with basic knowledge about education.

After the analysis of data gathered during these workshops the initial translation will be corrected, and instructions will be developed—in both languages—to improve future implementations of the ACAD Toolkit in other scaffold design processes. These instructions and the processes through which they are developed will then become potential research objects, for future research.

Conclusion and future directions

As the complexity of designing for networked learning increases, it is critical that we find and share practical and scalable ways of identifying and analysing the key structural elements that constitute the architecture of productive learning networks. Designing for networked learning involves finding good ways to promote the use of technology to connect people to the (global) learning community (Goodyear, Banks, Hodgson, & McConnell, 2004). There is, therefore, an imperative to ensure accessibility of ideas across economic, political, cultural and linguistic boundaries. What is more, in facilitating this process, the learning ought to travel in both directions enriching and developing understanding across contexts. This short paper reports on work in progress that aims to connect Spanish speaking educational designers with access to new design ideas. In doing so, we will not only be sensitizing these designers to the how tasks, tools and people come together to indirectly influence learning activity, but we will be sharing in the ongoing co-construction of design ideas across contexts.

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