

Towards A Teacher-Culture of Participation

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Abstract. There is overwhelming evidence that today's education is inadequate for responding to the demands of the 21st century and probably beyond. In order to facilitate students' learning and education, it will be pivotal to firstly re-consider what is required from the teacher and teacher professional competency. In this paper, we argue that for education being responsive to the requirements of the digital age, it is important to support teachers' creative design thinking and creative teaching practices realised by a teacher-culture of participation. Such a culture can nurse a "Can Do" mindset and "Want to" culture of participation leading to educational practices responsive to the needs of diverse students and society.

Keywords: Culture of Participation, Meta-Design, Design Thinking, Teacher-Culture of Participation, Edukata

1 Introduction

There are many researchers who argue that due to the traditional concept of schooling, inflexible curricula and learning materials and the traditional role of teacher, as central authority that teaches one subject at a time, there is little space for personalised and creative learning and teaching practices (Dumont, Istance, & Benavides, 2010; Engeström, 2008; Facer, 2011; Fischer, 2011; Kumpulainen, Mikkola, & Jaatinen, 2014; Leander, 2002; Mehan, 1979; Säljö, 2012). Moreover, Kumpulainen and Sefton-Green (2014) suggested that even though today's technology has the potential to provide learning spaces that foster knowledge co-creation, self-guided learning, creativity, social connection and that could link classroom communities and home, many schools and teachers struggle to meaningfully integrate technology into the curriculum in order to harness the aforementioned potentials.

This short paper explores the importance of why we need to focus firstly on facilitating a teacher-culture of participation, before we shall look at cultivating a culture of participation for student's learning and education. It discusses the opportunities and possible meanings of a teacher-culture of participation and Edukata as an example of a meta-design framework for a teacher-culture of participation.

2 The Importance of Facilitating a Teacher-Culture of Participation

For every successful cultural transition there are two plans needed: short-term and long-term. The short-term plan looks at how we can use the status quo for better in order to be able to make a culture shift or system change happen. The long-term plan looks at how to connect the dots of multiple short-term interventions in order to make a cultural transition happen. There is a strong body of research that argues that today's education system still carries artefacts from the 20th century, which are not adequate anymore to prepare current and future generation for the 21st century and beyond (Fischer, 2011; Gardner, 2009, 2011; Gee, 2004; Kumpulainen & Sefton-Green, 2014). Changing an education system is a tremendous endeavour and won't happen from one day to another, it needs many short-term plans and interventions in order to transform education in the long-term. If we apply the aforementioned method to education, hence, looking at short-term plans in order to make the status quo better, then we are faced with a great number of possibilities. Should we focus on the curriculum, school and classroom architecture, policies, teacher education, pedagogy, the role of the teacher, educational technology or all of it at once? Preferably all at once as a school culture is a complex and sensitive ecosystem of cultural norms, rules, expected behaviours and roles and so forth. Changing all at once is an unrealistic endeavour, however, one possible and effective short-term intervention is to empower teachers by boosting their creative confidence and facilitating a creative design thinking mindset, hence, rethinking the role of teacher in a digital age. Focusing on how to empower teachers, rethinking their role in a future educational culture and therefore facilitating a teacher-culture of participation has several reasons. Ken Bain (2004) investigated more than 70 college teachers, who were described by their student as the best teacher they ever had. The teachers were defined as having a strong impact on their student's way of thinking and some students stated that their teachers "changed their life". Thus, teachers are key to create natural critical learning environments (Bain, 2004) and Hattie's (2003) research about key variances in student achievements confirmed that the teacher has the most significant impact. The key variances on students learning performance, after the student itself (50%), is not the school structure, peers or class sizes, it is the teacher (30%) (Hattie, 2003).

Therefore, teachers often know their classroom, students and learning environment best. Yet teachers are often confronted with educational technology and digital games that are closed systems, with little space for adaptation. This often results in a lack of ownership over and comfort with new technologies and media, such digital games for learning (Hanghøj & Brund, 2010; Ulicsak & Williamson, 2010). Hence, facilitating a teacher-culture of participation means empowering teachers with the mindset of a meta-designer and providing design models that leave room for teachers to decide and design what they think is best (Toikkanen, Keune, & Leinonen, 2015). The manifestation of a teacher-culture of participation and mindset of a (meta-) design thinker, will ultimately allow teachers to facilitate a culture of participation in their classroom, by designing conceptual frameworks and creative environments to support a "want-to" participation and mindset for their students.

3 Towards a Teacher-Culture of Participation: From “Have-To” to “Can Do” to “Want-To” Participate

Fischer (2014) proposed four indicators for a culture of participation, i.e. Meta-design, Voices from different places: Spatial distance, Voices from the past: Temporal distance and Voices from different communities: Conceptual distances. Meta-design (Fischer & Giaccardi, 2006) refers to the “design for designers”. Hence, Meta-design is the process in which stakeholders, of the culture of participation, are provided with the necessary social and technical prerequisites by providing shared control over the design process. Concretely, stakeholders are empowered with “...opportunities, tools, and social rewards to extend a system to fit their needs, rather than being forced to use closed systems.” (Fischer, 2014, p. 202). Recent scholars suggested that it will be of high importance to build professional networks for teachers, so they can collaborate and update their practices (Johnson, Becker, Estrada, & Freeman, 2014; Redecker et al., 2011). The conceptual framework of a culture of participation supports recent studies that underlined the importance of encouraging teachers to become active agents of change in a digital age (Brečko, Kampylis, & Punie, 2014; Twining, Raffaghelli, Albion, & Knezek, 2013).

Yet, we suggest that before we provide conceptual frameworks and socio-technical environments that support a “want-to” participation, it will be necessary to first provide exercises, trainings, environments and tools that empower teacher’s creative design confidence and therefore foster a “can do” culture and mindset (as illustrated in Fig. 1). Therefore, we argue that a “can do” mindset is an unavoidable prerequisite to a “want-to” teacher-culture of participation. Thus, it will be pivotal to provide courses on creative design thinking and creative teaching practices as part of teacher education and professional development. In addition, these course need to be supported with tools and creation opportunities that will allow teachers to transform their design thinking into

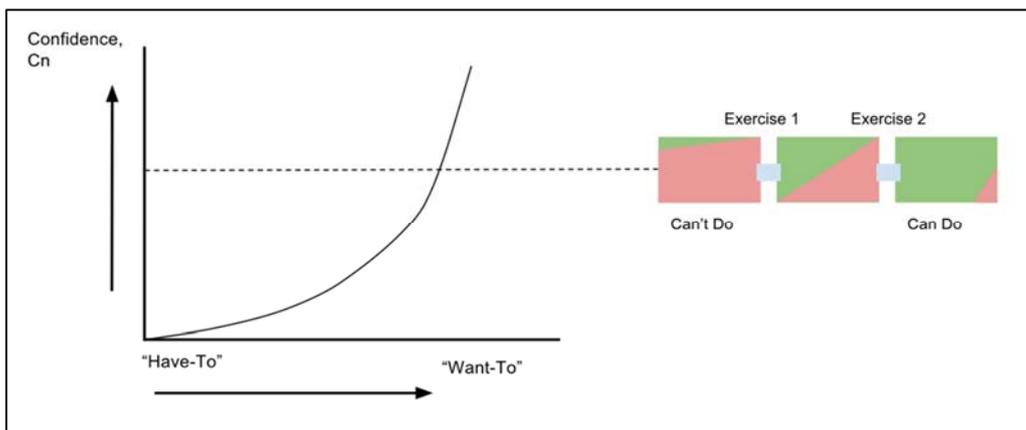


Fig. 1. – Providing Practices, Exercises And Tools That Nurse Stakeholder’s Creative Design Confidence Towards A “Can Do” Mindset, In Order To Move Towards “Want-To” Participation.

practice. Consequently, if teachers have the necessary confidence and “can do” mindset, it will be easier to move towards a teacher-culture of participation and provide teachers with a library of conceptual frameworks, socio-technical environments and meta-designs.

Example of a Teacher-Culture of Participation Meta-Design: Edukata.

A good example of meta-design model for teachers that supports a “want-to” culture of participation is “Edukata” (Fig. 2) by Toikkanen et al (2015), who developed a participatory design model with teachers for designing learning activities in schools. In particular, Edukata is a participatory meta-design model for educators that allows teachers to collectively design challenges for digital technology supported learning activities. Moreover, Edukata’s participatory meta-design approach does not just provide a “design for designers” model, but also strengthens the teacher’s confidence and abilities as designer and design thinker of innovative classroom activities. To facilitate a participatory Edukata design workshop at a school, there needs to be one facilitator, who is preferably a certified Edukata facilitator, in order to lead the design process. The facilitator is also responsible for recruiting one or two full-time members who are fully committed to the design process and who can and want to join all design phases. Additionally, an Edukata design process requires three to five part-time members, ideally those members are directly affected by the learning activity, hence, part-time members can also be students. By emphasizing that the members of the Edukata design process are locals from the school and at the same time providing an online forum, for exchanging and discussing ideas, and a library of templates for learning activities, Edukata addresses key indicators of Fischer’s (2014) culture of participation. Thus, the importance of addressing voices from different places (online forum), voices from the past (online database that documents various learning activities and outcomes) and voices from different communities (teachers and student as part of the design workshop). In addition to the participatory design method, teachers can access a free guidebook in various languages online, which provides all the necessary information to start facilitating design workshops at their school, hence, this provides a meta-design framework for teachers across the globe in various languages, which reduces entrance barriers in order to let teachers participate in meaningful activities. The creators of Edukata emphasized the necessity to reduce the complexity to minimum and to make Edukata as accessible as possible for teachers, so that there are no professional designers, psychologists or graphical artists are needed (Toikkanen, Keune, & Leinonen, 2015).

According to Lewin and McNicol (2014), teachers reported an increased engagement in exciting new exercises (86%), an uptake of digital technology (84%) and increased enthusiasm for teaching (73%). Edukata is a good example of providing meta-designs for teachers that support a “Want-To” culture of participation. It also illustrates the importance of providing training and facilitation events, in addition to a guidebook, with exercises and examples that introduces teachers to design thinking and a “Can Do” mindset.

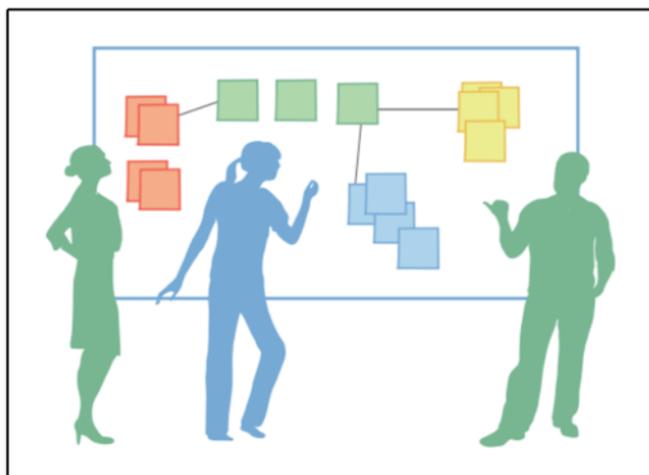


Fig. 2. Edukata's Participatory Meta-Design Model Allows Teachers to Design Collaboratively Digital Technology Supported Learning Activities.

4 Implications

Facilitating a culture of participation for education, and designing learning opportunities where personalised, creative, self-guided learning occurs and in which the learner takes part in solving personally meaningful problems, is a complex endeavour. Yet, if we look at the teacher, who has great influence on students learning experience, we suggest that it is of importance to firstly facilitate a teacher-culture of participation in order to facilitate a student culture of participation in their classroom. Hence, we argue that it will be crucial to firstly enable a teacher-culture of participation, however, this also raises several questions and challenges. It will be necessary to investigate and define the indicators of a teacher-culture of participation. Additionally, the question arises what kind of exercises, material, support and environment will be needed to facilitate a “Can Do” mindset and how can we provide (better) design frameworks for EdTech companies that allow teachers to engage as a meta-designer?

In this short-paper we did not intend to provide answers to these challenges and questions, but rather we tried to emphasize the need of a teacher-culture of participation by exploring the importance of why we need to focus firstly on facilitating a teacher-culture of participation before we try to facilitate a culture of participation for education. Facilitating a teacher-culture of participation opens up an opportunity to start re-framing the role of teacher in a digital age and to empower teachers as designer of their classroom. Finally, by allowing teachers to design learning environments we could move towards a culture of participation for education in which students become design thinkers and self-directed learners, who *can* and *want to* engage in learning that matters.

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