PRACTICAL SOCIAL CONSTRUCTION OF BLENDED LEARNING

Karen Fritzbøger, Jesper Balslev

Copenhagen School of Design & Technology (Denmark)

Abstract

In the Spring of 2014 Copenhagen School of Design & Technology received funding for an experimental research grant to analyze and contextualize the school's current use of technologies in learning, and to use this research to develop tools to help the lecturers and students qualify their choice of digital learning tools.

An empirical study from 4 different educations revealed heterogeneity of ad hoc practices in their choice of technologies to support learning.

To approach this methodologically, a dialogue tool was developed - "Learning Landscape" - its design is contextualised through ANT-theory (Latour, Bruno, n.d.), Social Studies of Knowledge Practices (Law, 2002), and Situated Learning (Lave, J and Wenger, E, n.d. 1991).

This paper thus investigates the effects of using a practical method that organizes a conscious negotiation between the relevant actors involved and accounts for the theoretical foundation of its design.

In the experimental research we investigated the value of a co-creation process between students and lecturers with the goal of engaging students in the process of developing blended learning designs - working from the understanding and values of The Formular of Competences Development (Kompetenceformlen) by Knud Illeris (2012). Illeris purports that competence development consists of three important aspects that will be elaborated on in the paper.

The dialogue between lecturer and student is framed by the design of a "*Learning Landscape"* – a practice where the learning process starts with the negotiation of *how to plan a course*, continues to the *practical experience* and is concluded with internalization through *reflection and evaluation.*

The design is inspired by the concept of checklists (Gawande, 2011). *The Learning Landscape* helps the students and lecturers to take the important details of the blended learning experience into account. It does so by guiding actors through the process of discussing choices in relevant categories, working with their own learning context, topics and learning goals as working case.

We use the principles from *The Decision Model* by Poul Heimanns[1] (Hansen, 2010: 137), with two added categories suggested by Jens Jørgen Hansen, Ph.d. (Hansen, 2010: 144).

The two categories, *Learning Technologies* and *Learning Space*, draw attention to the influence and role that modern digital technologies have in education today.

As part of our research we were conducted tests twice in February 2014 and a redesigned version will be tested again in May 2014, the results from that will be presented at the IATED conference in july 2014.

Findings

The tests reveal the method has potential as a knowledge sharing tool and as a tool for acknowledging new possibilities in choosing technologies for learning.

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[1] The Decision Model: Conditional factors; *anthropological-psychological and socio-cultural.* Decisional factors are: *Intention, content, method and media choice.*

In the co-creation process the students showed the need for guidance from the lecturers; to define the importance of the project, to acknowledge contributions and to link the activity to the students' education and learning.

Technology and learning as a topic is new to both lecturers and students. In this regard some were insecure concerning the goal of the dialogue. And technology tends to be discussed through frustrations related to malfunctioning facilities (when the WI-FI is down e.g.) and not through their learning potential.

Keywords: Innovation, technology, research projects.

1 INTRODUCTION

Where do the tropes about the importance of developing digital learning tools in, and for the educational sector, come from?

On a national level:

"*E-learning tools (digital learning aids) contribute to developing both the education system and the ongoing competence development of the workforce in Danish enterprises. Substantial funds have been earmarked to promote increased use of information and communication technology (ICT) in the education sector. In addition, as part of the reform of primary and lower secondary education, it has been agreed that digital competences and digital support of teaching need to be integrated in all subjects as well as the new activity lessons. A partnership is to meet these and other initiatives in the field through intelligent and integrative efforts to stimulate the development of a well-functioning digital ecosystem that can increase the use of innovative e-learning tools in Danish enterprises and in educational institutions as well as strengthen the opportunities of enterprises in this field. The perspective is to raise the level of competences, including digital skills, in the Danish workforce and promote exports of e-learning tools." (The Innovative Denmark, 2013*).

At Copenhagen School of Design & Technology the importance of developing digital learning tools is expressed in the following statement by the rector:

"Also, it is expected that blended learning becomes an integrated part of the educational supply from KEA (Copenhagen School of Design & Technology)" Ingo Østerskov (internal leadership paper, our translation)

Furthermore Programme Director, Mille Østerlund expresses the following perspective on digital competences when interviewed regarding new student applications:


KEA – Københavns Erhvervsakademi delte et link.
30. januar i nærheden af Copenhagen

KEA har igen haft et flot ansøgertal på vinteroptaget og kvitterer ved at optage 15 % flere studerende sammenlignet med sidste år.

Det er særligt de digitale- og internationale uddannelser, der er i vækst – og det glæder Mille Østerlund, Programchef på DIGITAL: "De unge gør helt rigtigt, når de vælger at gå efter de digitale færdigheder – dem er der stor efterspørgsel på fra arbejdsmarkedet."

"The young people are doing the right thing, when they choose to pursue the digital competences – the job market demands them" (our translation).

Copenhagen School of Design & Technology (KEA) – our workplace and field of study - does not mention its use of digital learning tools in its communication to its stakeholders, nor its relationship to the visions in the strategic paper quoted above – only in unrelated snippets. In fact it is not possible to trace any official documents that outline or even hint at a methodological, cross-disciplinary modus operandi. Neither in its public discourse, nor in internal documents. This does not mean that Copenhagen School of Design & Technology is not using digital tools as an effort to enhance learning.

Our study reveals an extensive and pervasive use of digital learning tools. Digital devices are abundant in the classrooms. Common tools in the classroom are (and this may not come as a surprise to the contemporary reader):

Microsoft Office
Gmail
Hotmail
Fronter (LMS)
The Adobe package
Facebook
Apple IOS devices
Skype
Youtube

It becomes clear that Copenhagen School of Design & Technology is deeply submersed in "digitality". In that respect it meets the criteria of Inno+ (The Innovative Denmark), maybe even exceeding them in quantitative terms.

But how do we assess the quality of the tools we observe in the classroom? How do we know if they support learning? How can we determine whether "they work"?

Just as one may choose to gauge the value of a hammer by examining the practical and linguist contexts in which it is used, instead of trying to epistemologically extract its intrinsic 'hammerness', one could ask the following questions:

What do we mean by "digital"?
What do we mean by a "digital competence"?
What do we mean by "digital support of learning"?

One could quickly invent scenarios that would render the "digital" in the above quote problematic. Is the Spectrum ZX a relevant digital resource (one of the first personal computers from 1982)? Does the ability to program a VHS in itself constitute a transferable digital competence? Does congratulating somebody with his or her birthday on Facebook (in the classroom) support learning?

In other words: how does it make sense to emphasize the value of digital learning tools and digital competences without scrutinizing the specific digital objects, and the concrete digital practices?

In the following paper, we will not try to answer those questions, but will, however, look at how the use of these terms and the way they were invoked during the experiment is a practice, which we can use to define how "digitality" constitutes itself at Copenhagen School of Design & Technology. This in itself could qualify our reflections on the matter, and maybe bring us closer to systematic super-level strategies that are explicit and accessible, unlike the current situation, which is best characterized – from an organisational point of view - as a set of unscrutinized, ad hoc, arbitrary, autonomous and heterogenic practices. To put it bluntly: digitality is what the individual lecturer thinks it should be – not publicly purported, and not necessarily motivated for by its effect on measurable learning goals.

Our goal is not to end up offering a definite evaluation tool to measure the validity of chosen solutions, didactic methods or specific software platforms.

Or in the words of AnneMarie Mol: We do not want to *"...offer normative advice about how to they should be handled in practice. It is instead an attempt to open them up for discussion.[...] Those involved are invited to spend more time and effort to address questions that involve values: '**What do we want**'" (Our emphasis, Mol 2002: 249)*

To attack this complexity of problems – digital technology, learning and the expectations of society (in this specific paper, in the guise of the Ministry of Higher Education and Science we will briefly sum up the theoretical framework within which we have conducted our experiments.

What is technology?

At the end of "Aramis or the love of technology" (Latour, 1996) has one of the protagonists give his

explanation for the reason for the failure of "Aramis"[2]. This ends a long investigative ANT-journey through official documents and interviews with involved actors. The study is an interesting case study of prestigious technology-gone-wrong, in a context with many actors.

"They really succeeded in separating technology from the social arena! They really believe in the total difference between the two. To cap it off they themselves, the engineers and the technologists, believe what philosophers of technology say about technology! And in addition, research for them is impossible, unthinkable; its very movement of negotiation, of uncertainty, scandalizes them." (Latour 2002: 287)

"You believed in the autonomy of technology" Latour 2002: 292)

As mentioned in the introduction, this paper will not attempt to philosophize over the intrinsic values of the (digital learning) technologies used at Copenhagen School of Design & Technology. This is in conscious contrast to dominant positions on technology from e.g. developers and vendors that ascribe a number of stable, universal, autonomous and generic values to the technology they are offering – downplaying the human resources necessary to contextualising their technologies and keeping them useful.

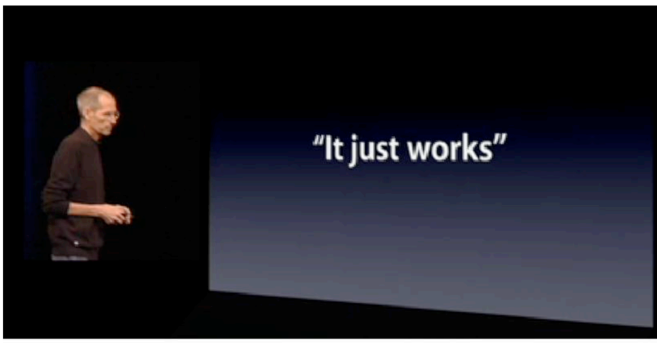

Figure 1: Example of a perception of technology ascribing essential qualities to technology, in a social void.

From a Latourian point of view, it is not fruitful to separate technology from the social arena. In this lies a broader assumption of technology that tries to document how its values are constructed through social processes or maybe more precisely: how technology reinforces pre-existing social connections, *"[it's not] technology that is 'socially shaped' but rather techniques that grant extension and durability to social ties*" (Latour, Ant, 2002: 238). This has been described in numerous STS[3]-studies/Post-Ant studies.

One example:

In "Cutting Surgeons, Walking Patients", AnneMarie Mol looks at the rationality behind the choice of two available treatments for a specific arterial disease ("lower limbs"). The two treatments are "operation" or "walking therapy". In the article Mol demonstrates how research papers about "walking therapy" downplay the role of the staff motivating patients to stick to the therapy program. On the other hand, she documents how doctors in some contexts prescribe "operation" motivated by staff availability (surgeons with experience), even though "walking therapy" in some cases is proven to be the better treatment. This is to point out the importance of examining the benefits of available technologies by including the social arena in which they are embedded, and how even stable sciences with at long history of rational status are prone to social biases. The rationality at play here can be interpreted as socially shaped or as an extension of social ties.

The above example, though not related to digital learning, illustrates the value of understanding technology in the social context in which its use is negotiated. We will adopt this perspective to help us bypass the apparent complexity in the total number of different digital phenomena at the Copenhagen School of Design & Technology.

[2] Aramis was a prestigious French mass-transit project that was in development from 1963 to 1987.

[3] Science and Technology Studies

Situated Learning

In situated learning, Wenger and Lave propose a model of learning that is rooted in communities of practice. Instead of transmission of knowledge, learning is regarded as a social process:

"Conventional explanations view learning as a process by which a learner internalizes knowledge, whether 'discovered', 'transmitted' from others, or 'experienced in interaction' with others." (Lave, Wenger 1991: 47)

"Participation is always based on situated negotiation and renegotiation of meaning in the world. This implies that understanding and experience are in constant interaction – indeed, and are mutually constitutive." (Lave, Wenger 1991: 51)

Finally:

"...learning involves the whole person; it implies not only a relation to specific activities, but a relation to social communities – it implies becoming a full participant, a member, a kind of person". (Lave, Wenger 1991: 52)

We adopt this perspective on learning.

1.1 DEALING WITH COMPLEXITY

So let us repeat: we have an educational institution – committed to implementing digital competences across a wide range of courses and subjects, in an environment where there is an uncoordinated high number of different digital platforms in use. We will describe this situation as complex, in the words of John Law and Annemarie Mol:

"There is complexity if things relate but don't add up, if events occur but not within the processes of linear time, and phenomena share a space but cannot be mapped in terms of a single set of three-dimensional coordinates." (Mol 2002: 1).

We choose to deal with this situation – not by simplifying or ordering but by assembling "lists, cases and walks"[4] in a unified concept that 1) explicitly stages the actors to have them renegotiate meaning 2) adding to a publicly available collection of complexities in knowledge practice, "bringing the practices into being". (ibid.)

Our answer to dealing with the complexities and the multitude of digital forms and their value to learning, is to methodologically ask these questions in a setting where its meaning is routinely and explicitly negotiated and renegotiated between involved actors.

The physical output of this approach is a "learning landscape" – a checklist disguised as dialogue tool[5] – that the actors (lecturers, students and a representative of the business case) go through three times. The first time the actors are asked to imagine a worst-case scenario in each relevant category (learning goals, choice of technology, choice of learning space etc., see below for full description). The second time, a best-case scenario, and finally a third time ending with the group's realistic proposal. This is proposal is submitted to an opposing group. The use of this method generates concrete proposals for specific modules.

2 METHOD

RESEARCH QUESTION: We are engaging in the challenges of meeting organisational goals and political demands for innovation in education and for graduates with digital skills to meet the demands of the 21st century global job market. Our central question is:

[4] Three proposed methods to deal with complexity without simplifying, (Mol, 2002: 13).

[5] Inspired by Atul Gawandes "The Checklist Manifesto" – a study in how especially the construction-industry and the airline-industry deal with complexity by methodologically going through simple steps in a linear sequence; in shared documents. (Gawande, 2011)

How can we initiate a change process – moving from arbitrary choices concerning digital technology in learning to more reflected choices considering the possibilities in new ways of learning?

And how can we equip students and lecturers to engage in a co-creation process where they work together creating new practices/principles relevant to the individual education?

2.1.1 The organisation of experiment and activities

The organisation of the experiment and its activities consists of:

1) A developer team responsible for overall planning, coordinating, developing and facilitating workshops, developing The Learning Landscape (a dialogue tool) and assisting lecturers in designing and executing local blended learning experiments.

2) An experiment-team consisting of lecturers representing the four 4 participating educations / study programmes; Communication Design (BA), IT Technology (AP), Multimedia Design (AP) and Architectural Technology and Construction Management (BA). With the exception of one, the principles of blended learning were new to all the lecturers. Their practice concerning use of digital technologies in teaching was related to the tools of the profession they are teaching.

Data mapping students' and lecturers' use of and behaviour concerning digital technologies were collected whilst mapping workshops where the participants worked in groups designing personas based on their own information.

Inviting knowledge sharing and transparency in the experiment and to facilitate coordination of information materials and data gathering, a wiki was set up at http://www.keablogs.dk/wiki (this website also contains documentation for the project). Testing of the dialogue tool *Learning Landscape* has been conducted in workshop setups; twice in February 2014, after a redesigning process again in April, and after further redesign and addition to the tool was tested again in May 2014. The results of this third test will be put forth at the IATED 2014 conference.

2.1.2 Theoretical principles – The Formula of Competences Development

Aiming to facilitate a learning process resolving in competence development, we have designed our experiment activities and dialogue tool from the theoretical framework described above and guided by the principles from Knud Illeris *Formula of Competences Development* (2012).

Illeris (2012) describes three components necessary to obtain learning that results in the development of competences:

> **Engagement – practice (or problem) – reflection = competence development**
> (Kompetenceformlen) by Knud Illeris (2012) [1]

He explains how engagement is key for learners to reach a learning outcome of competence development, as this will require them to mobilise mental energy to overcome the challenges and sometimes uneasiness of learning. In our design it is essential to consider the learners' experience and motivation in the learning situations, those factors are as important as the subject and content they are teaching. We involve students in both evaluation and learning design; including choices of methodology, pace, order of activities, learning technologies etc.

Learning is staged and facilitated through discussing problems and deals with specific situations - and the action-related character of the competences. It can be students working to find a solution to a problem or describing experiences in the actual area of practice, in both cases with the goal to enable transfer. In our design we work with the practice of learning and solving the 'problem of learning design', and through that process gaining understanding of own learning process.

Reflection is a central activity in our design – staging a dialogue asking *what happened?* and working with potential answers going through components, activities and factors framing the learning situation. Reflection is needed in order to qualify decisions to add changes or adjustments. Our purpose is to activate what Illeris (2012) calls conscious reflection in the attempt to enable students gaining intellectual and psychological qualification of the experience made.

2.2 The Learning Landscape

Thus the motivation behind the *Learning Landscape* is to frame dialogue between lecturers and student, thereby assisting a culture and practice where the learning process for students starts with

the negotiation of *how*, continuing to the *practical experience,* concluded by internalization through *reflection and evaluation.*

2.2.1 Learning design principles and theory

Framing a dialogue of choices in learning design we deem it adequate to work from the principles of Heimann's didactic *Decision Model,* (1976) as the model represents the teaching and learning oriented didactics, focusing on the *how* of a learning design. The model itself is meant as a tool to assist the teacher/lecturer staging and planning teaching with the purpose of students' competence development.

Jens Jørgen Hansen (2010) suggests that two categories are added to the decision factors of Heimanns original model, drawing attention to the influence and role that modern digital technologies have in education today. The two categories are *Learning Technologies* and *Learning Space*, Hansen argues that learning technologies (functional learning tools) have the possibility to fundamentally change the students' learning conditions, in the way they enable working with transforming and curating knowledge, producing and communicating work. The learning space is expanded through online platforms and media, and the teacher/lecturer has to consider how to secure the different spaces in a meaningful way.

Our observations and documentation (albeit on a relatively small scale) of how lecturers and students use digital platforms and online media/programs confirm the relevance in Hansen's suggestion to target *Learning Technologies* and *Learning Space* as independent categories. Our data convincingly illustrate heterogeneity of ad hoc practices in choice of technologies to support learning. Our data show that this heterogeneity lead to lecturers missing the opportunities and possible benefits of the new and at the same time failing to meet contemporary requirements to develop digital competences in the student and securing their digital literacy.

2.2.2 How does it work?

Fig.1 illustrates how we staged The Decision Model as a dialogue tool for a co-creation process. We have divided the conditional factors into more defined categories: students, lecturers, professional practice and facilities. We have tried to simplify the decisional factor *Intention* by focusing on *the learning objectives* of a course, lesson or elective in an attempt to make it more relatable for the participants. In our graphic model we use an arrow to illustrate the entry of the dialogue to be defining learning goals. The remaining categories on the other hand are not put in a special order as it is important that the participants work with the categories as interdependent, meaning that choices in one category will effect the other categories, making it necessary for participants to work holistically with their analysis or design, considering how the categories can combine and support each other.

The Learning Landscape used for analysing is assisted by questions in each category, the questions help map the activities and choices made in the case in question, and guide the participants to engage in the analysis of the effect and impact of these choices. The process is concluded by completing *the outcome* category with descriptions of *what happened* and reflections on *what the effect was*.

Fig. 2 illustrates *The Learning Landscape* used for developing learning design. In this version the participants work to design the ideal learning setup, taking the affecting elements into account. It can be a redesigning case or it can be the designing of something new. In this version the aim is both to formulate questions in each category, and after that: formulating the choices that were made. The process is concluded by filling out *the expectations* category with descriptions of *what will happen* and reflections on *why*.

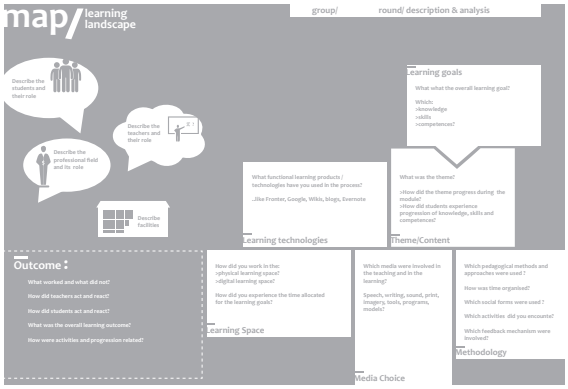

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Fig. 2 The Learning Landscape – for analysing

Fig. 3 The Learning Landscape – for development/d esign

2.2.3 Design development

The Learning Landscape (LELA) is being developed through the method of Interaction design [2] consisting of iterations of *establishing requirements, designing alternatives, prototyping, evaluating and redesigning*. The user involvement is central as it secures feedback to design assumptions and guide adjustments and redesign. Following is a description of the design process we will subsequently elaborate further on the findings.

The design process of LELA was initiated by analysing results from the mapping workshops. This revealed the need frame the difficult topic of learning process and learning design, and to make the desired dialogue simpler to initiate, the staging more relatable and for the topic to appear more available.

To accomplish this we came up with the idea to develop a game or use a tool guiding actors through the process of discussing choices in learning design, divided into categories that all effect the learning situation, letting students and lecturers work with their own context, topics and learning goals as working case.

The first test was conducted in a class of Communication Design students (PBA). The result guided us away form the idea of a game as the students did not experience the theme as being relevant for a game, not being deemed credible as something you strive to win. At the same time the test revealed that most of the students basically did not feel that reflecting on their own learning process was important, and most of them were of the opinion, that learning design is the lecturers' business. Through finishing the discussion and wrapping up after the test some of the students appeared to gain an understanding of the possibilities; co-creation can offer them value and insights with regard to having influence in the choices of leaning activities and the pace of activities. However, the predominant conclusion from observing the students was that the topic remained challenging to grasp, uncovering the need for a more integrated and holistic way of framing the work with this topic with students.

LELA was redesigned without the game element, restructured as dialogue tool (based on Heimann (op.cit.) and with the added categories by Hansen (op.cit.) and presented in a more guiding graphic design, and assisted with *how to* descriptions and category explanations. The second test was then set as Co-creation workshop – arranged for participants from four different study programmes/educations. Two educations participated with both students and lecturers, the two other educations represented by lecturers. Three observers documented the interactions and dialogue between participants. The test confirmed the findings from first test, concerning the students' confusion regarding their role in reflection, evaluation and redesign of learning. It was evident that to stage this dialogue better for the students, they had to be better prepared and informed by their lecturers, and the working case should be more relatable, maybe by targeting a course they participate in or have just finished.

Testing with participants from four educations pointed to the differences in working culture between lecturers as having an important effect on the teams' abilities to work together, reflecting on their own practice and being able to discuss in a more abstract manner, and giving way to new ideas. As such

LELA showed to work as intended for two of the groups, facilitating and guiding dialogue and generating new ideas, but for the team of lecturers characterised by a culture of independent planning and execution of teaching, it seems evident that a more facilitated and controlled process is necessary, for them to gain the benefit of a joint process.

The co-creation process between lecturer and student revealed an interesting paradox as students did not consider themselves capable of analysing and contributing to the process, but the test contradicted their own assessment, as they actually shared relevant observations, reflections and pointed to relevant areas, where the learning design could be optimized and redesigned to suit student motivation and to meet learning needs. In the interactions between lecturer and students, the lecturer actively asked for input. However, the lecturers had difficulties explaining and framing the point and value of the matter to the students. Revealing again, the need to prepare lecturers to explain and guide students through the Learning Landscape process.

In an attempt to meet the need for structured introduction to learning design expressed by lecturers and students alike. We restructured LELA to be used as analysing tool working with specific courses as case. We did so by educating the participants in the principles of the tool and exemplifying the categories in LELA, by mapping the content and choices of the course. The mapping was guided by questions in each category. LELA was then tested on a new team of five lecturers. The lecturers expressed it as being easy to engage in the process, as it was uncomplicated for them to reflect using their own examples and experience. But understanding the connection between the categories of LELA still raised questions and left the lecturers a little insecure whether they applied them correctly.

We are currently redesigning and expanding LELA to also include a planning tool that supplements the development version of LELA. The purpose of the planning tool is to transform the more abstract design of choices in the categories of LELA and to contextualise them in a structured planning format. A scheduled test among one lecturer and the students (from Multimedia Design programme) of a small elective (12 students) will also include the students providing feedback to the planning tool and inviting them to contribute to adjustments and redesign with their ideas.

As a continuation to the experiences and learning acquired through the work with LELA, the experiment team of lecturers have worked on planning and executing tests of blended learning in each education with the exception of one. Feedback from the lecturers will be presented under results.

3 RESULTS

3.1 Objective 1 – technology (and behaviour)

Some interesting findings in our experiments are:

The number of different digital tools used.

The general unawareness of colleagues' use of digital tools to support learning.

The amount of "personal" platforms (mobile phones and Facebook) listed when people were asked to "register [their] contact with a relevant professionalism on digital platforms".

3.2 Objective 2 – social construction dialogue & co-creation

LELA has shown potential as a tool to facilitate dialogues between students and lecturers and between colleagues, and it helped remind the participants to consider the interdependence between the categories. In the positive sessions students felt secure within the framework, to speak candidly about negative experiences, to formulate what they wanted and felt empowered in formulating how to plan modules that would suit their educational need. Most lecturers and students participated and shared reflected input, and three out of four groups were able to develop suggestions to new blended learning designs, created with their own learning context in mind. The students were both insecure towards their role as co-creators of learning design, and were reluctant to take on the challenges, as it was not apparent to them, what they could gain from it. Some students expressed it as being the lecturers' business, while others thought of it as being something that would only benefit future students, and they did not see a connection to their development as professionals. It is evident that the students demand clearly defined purposes to the learning activities, they are to engage in, and the feedback seems to portray a tendency and culture with some students, where they deposit the

responsibility of their learning in to the hands of the lecturers. In the single event of working with LELA as tool, it showed to be difficult for the lecturer to explain *how to proceed, why to do it* and *the relevance* for the students. Pointing to a need to equip lecturers better in order for them to participate in and prepare their students to participate in co-creation activities.

The co-creation process of LELA has potential, but a more frequent or even continuous use of the tool seems necessary in order to acquire a change in the roles and attitudes of the students. This is required to fully succeed in achieving learning, mirroring *the formula of competence development*, as the engagement element needs to be strengthened.

During tests of both the analysing version and the development version of LELA the tool assisted structured dialogues between lecturers. That being said the test revealed huge differences in lecturers' understanding of their own role, experience and methodology. This causes a gap that challenges the potentials in cross-disciplinary cooperation and united principles/practices. A reflection would be to work with an individually adjusted pace of implementation in the different departments.

3.3 Objective 3 - Implementation of Blended Learning

The Blended Learning experiments integrated in the educations that followed the work with LELA, revealed difficulties transferring the new knowledge into the reality of everyday practice and responsibilities. Lecturers report that the students responded with confusion and frustration when introduced to new digital tools and new learning methods doing a semester or course. Thus making it challenging or impossible for the lecturers to implement the blended learning to this extent they first intended. When the blended learning element was of smaller scale and in relation to specific assignments (multiple choice tests and clickers e.g.), the students responded with engagement, highligting the individual part as positive.

DISCUSSION

Theoretically the values of using digital tools to enhance learning are not a quality of the digital tools themselves. It is the conscious reflection and negotiation in specific contexts between specific actors that create the value. What happens when this is made explicit? Our findings indicate that students become frustrated and experience shattered expectations about the value of these technologies. Comments from some students reveal that a lecturer should make those technological choices. On a critical and reflective note this could be seen as students expecting to participate in learning activities, which provide them with competences to a predictable and stable job-market. However, theory seems to support the fact that an agile mind that is ready to negotiate the value of technology to specific contexts is better at developing competences (Illeris 2012). It is thus tempting to make the somewhat self-evident observation: Houston, we have a problem!

The formula of Competences Development reveals this urgency of activating student engagement for them to not just acquire skills and knowledge, but competences – enabling them to navigate the professional world of the 21st century.

4 CONCLUSION

4.1 Blended learning

One of the groups that participated in the study (Communication Design) showed instant eagerness – in parallel experiments - regarding multiple choice quizzes. One hypothesis to explain this is the "digital generation's expectation of "immediate gratification with deferred awards", shaped by their relationship with videogames and other gamified communication products (Jukes, I and McCain T, 2013: 35). Student engagement and motivation seem to increase in situations that relate to feedback, evaluation and assessment.

Where do we stand with our experiment? To deal methodologically with a whole institution's use of technology in teaching, across so many different courses and specialties, is a daunting task. Results are inconclusive and we have just scraped the surface of a process that ideally should result in common knowledge of each other's successful blended learning set-ups, a culture of actively choosing digital technologies on the basis of systematic negotiation and reflection, and finally help students shake off their fundamental insecurity regarding their role in thinking about how course modules should be designed. However, we feel reinforced in our assumptions about the value of thinking about

what motivates us in our choices of technology – maybe this can pave the way to a future where we use technology in teaching, exclusively to the extent that it supports it. Not arbitrarily and unmotivated as is the case now.

4.2 Learning Landscape

Acknowledging the challenges related to the transfer of new knowledge and the time needed to truly reform existing practices, we conclude that the greatest potential/opportunity of LELA would be to introduce and work through the already established structures and organisational frameworks – especially in the education and qualification of lecturers. By so doing, we ensure that the Learning Landscape over time becomes a collective tool that provides the lecturers with a common terminology and over time equips lecturers to motivate students to participate in evaluation and design processes, by making the relevance of reflection of learning evident to the students. It also needs to be tested systematically with the physical presence of a third partner representing real-life problems in order to nuance Copenhagen School Design & Technology's own internal beliefs. Finally, one could try to convey to the lecturers that this is not an exercise in redistribution of power between lecturer and student, but a tool to bring methods into being by negotiating their value explicitly.

5 ACKNOWLEDGMENTS

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