



# LUND UNIVERSITY

## INTERPRETING THE *HOW* OF INTERACTIVITY IN OFFLINE AND ONLINE LEARNING ENVIRONMENTS

Perceptions of interactivity in offline and online learning experiences  
to study motivations and engagement  
in the context of today's participatory media landscape

### MASTER THESIS

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## Abstract

There are countless amount of questions about online learning today, this dissertation meant to extensively address two of them: the importance of control over learning pace and synchronous social learning – in other words – interactivity. Placing online learning in the context of the current participatory media landscape serves with understanding why people engage and participate and how these motives are related to learning online.

The aim of this research is to map out different perspectives of online learning taking into account these two major approaches and dive into related concepts such as the importance of being seen, the dynamics of meaningful contribution with perceived level of autonomy in learning, the broader social context in which learning becomes performed, the effectiveness of interactivity in putting explicit knowledge into tacit and the desired level of interactivity when learning is being perceived voluntary and obligatory.

The next part of the dissertation will provide with literature on the field of online learning, pushing forward the importance of interactivity that is explained as the missing feature of online learning environments compared to classroom ones, calling attention to include perceptions of offline learning into the study. The constructivist process of learning, the socio-cultural view that underlies the importance of collaborative knowledge creation, the process of knowledge management and the role of web-based technologies in their development will be addressed in order to stress the need for studying the effectiveness of online learning associated with interactive features.

The special focus of the research is to understand contextual factors that explain motivations and engagement with online learning in organizations, using a phronetic case study approach of the company Clerk.io and qualitative semi-structured interview method with ten employees. The second half of the dissertation will explicitly analyze the answers of the interviewees and provide with an extensive dialogue between media theorists' perspectives and the literature of online learning. Instead of providing with generalizations, the research contributes with *how* answers and invites online learning enthusiasts to study the dissertation's conclusions in detail.

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**“It always seems impossible until it’s done” – Nelson Mandela**

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# 1. Introduction

## 1.1. Perspectives on the Current Media Landscape Associated with Changes in Perceiving Interactive Learning to be Engaging

Schools and media indicate two diverse sources for information, however they do have many features in common that have been changing together dynamically over the past century. Simply put, the former is responsible to educate, the latter provides with information about the world; at the end of the day they both share knowledge with the society in diverse ways. Before the emergence of new media technologies, both institutions were similarly looking at their audiences as one coherent mass. Teaching and transmitting knowledge for masses do not necessarily require interaction; communication is rather one-way as the purpose is to provide messages without challenging perspectives on them. The mass which is seen as one coherent entity, which feels its contribution does not matter, which is told to believe in what she is presented with, which is not invited to think critically about the world and which therefore does not participate. Whilst in the midst of digital revolution, current perspectives on participatory media look at audiences as individuals who are interactively reshaping media content when they realize their contribution matters to themselves and to others (Gauntlett 2011; Jenkins et al. 2013). The new media landscape requires audiences who interact with each other, create their own understanding of the content, comment, share and communicate in many ways. As new media is spreading over the world, its presence showed itself in the methods of education as well. Educational technology has been shaped by the new media landscape as learning is moving from classrooms to online environments where knowledge is easily accessible anytime and anywhere. This contributes to a more personalized learning experience, which supports the contemporary standpoint of the importance of knowledge in a society where lifelong learning is becoming the core feature of success for the growing generations. The innovation of information and communication technologies (ICTs) support the many-to-many type of communication in learning and this is also observable in the current perspectives of participatory media landscape with the use of ICTs in sharing knowledge with the world and learning from the web. Similarly, to the drive for engaging with new media, online learning also possesses potential in giving freedom to users so they have power over what information when and where to use, however the lack of social element might jeopardize the effectiveness of learning and the engagement with it. Online learning research indicates that interactivity has been the most studied phenomenon in relation to traditional learning, since this feature is what separates them from one another. As we will see later in the dissertation, interactivity in online learning has been mostly concerned about its effectiveness and many research showed that

interactive features are indispensable to be included in the systems (Chapter 3.). Our focus therefore will not question whether interactivity is necessary or not, but rather contribute with how it has been perceived in both offline and online learning environments by using a phronetic case study approach with qualitative semi-structured interview method. Learning Management Systems use different interactive elements on their platforms, however online teachers are not necessarily accustomed to exploit those features, therefore they are more likely to provide material that is overly descriptive, boring and lack interaction. Wouldn't this be the counter-objective of education that happens online as part of such participatory media ecology?

The issue arises when such tool for learning that was built to provide control over access and pace for anyone who is willing to participate is lacking the most crucial element that makes acquiring knowledge more efficient, elaborate and most importantly engaging. This is called the social element. The decreased sense of belonging through interactivity and the increased control over one's contribution create a challenge for an engaging online learning experience in asynchronous virtual classrooms. Establishing perceptions of interactivity in both offline and online learning environments are necessary in order to understand what interactivity as such means from the point of view of interviewees. Does it mean that when an environment allows for face-to-face interaction makes the experience interactive? The rationale above makes us formulate two initial research questions that allow us to study perceptions in both learning environments:

- I. How is the level of interactivity coming from teachers and peers being perceived in offline and online learning environments according to interviewees of Clerk.io?  
*- How does perceived interactivity effect experiences being motivating and engaging?*
- II. In which ways do control over learning pace and the social element contribute to the learning experience?  
*- How do these experiences become motivating and engaging from the point of view of the informants?*

## 1.2. Establishing the Research Questions for Studying Online Learning in Different Contexts with Special Focus on Organizations

The use of Learning Management Systems in university education is increasing and becoming popular alternatives to implement as the sole training solution in organizations. Meanwhile online university learning is used together with offline classes, organizations are increasingly investing only in online solutions to improve time efficiency and cut back costs. The

dissertation will address ten interviewees' perceptions of interactivity about their experiences with offline and online learning in university learning, online learning outside of university and organizational online learning. We will see later that one of the most under-studied phenomena of online learning research is the one in organizations, therefore the focus will be intentionally led towards contributing to a more effective online learning implementation in organizations with the case study of Clerk.io, where online learning has been used as the only training solution for employee onboarding. The experiences of interviewees differ from how they perceived learning motivating and engaging in universities and outside of universities however the common ground of their organizational online learning experience is Clerk.io where they were trained with the same online learning platform, called iTeach Clerk.

There is a significant difference between university and organizational online learning, which will be also addressed in order to come up with solutions for a more effective and engaging online learning solution for organizations. This difference is the perceived level of obligation to learn, which means that perceived control over learning pace in both learning environments will reflect on the desired level of interactivity, therefore two other research questions are necessary to be introduced:

- III. In which ways interactivity become more or less important when learning is being perceived as voluntary or an obligation?  
*- How does the environment where learning happens affect such experiences?*
- IV. How to successfully implement online learning in an organizational environment according to the interviewees?

The analysis part of the dissertation will address the research questions and provide with extensive answers to the sub-questions, however in the first part of the dissertation we will look into the theoretical underpinnings in which the initial idea of studying online learning can be discovered: why do current participatory media perspectives of Gauntlett (2011), Jenkins (2014) and Jenkins et al. (2013) call for placing online learning research more vigorously within the context of the broader media landscape?

## 2. Theorizing Perspectives on Participatory Media

### 2.1. Making a Mark on the World by the Pleasure of Processes of Creativity

Sense of fulfillment by one's contribution to anything that is perceived to be meaningful for an individual is less a matter of the result but more a matter of the process itself, argues the British media theorist, David Gauntlett (2011). Philosophies of John Ruskin and William Morris provide with basis for Gauntlett's argument as both thinkers agree that self-expression is a ground for self-fulfillment that brings joy through creative opportunities (pp. 22-44). According to Gauntlett (2011), making instead of having things done contributes to enjoy the experience from the process rather than being given the outcome (pp. 220-221). This brings him to the second principle that is associated with the act of making that is meaningless without the process of sharing this with others (pp. 221-222). The media theorist discusses social science studies on happiness in order to prove that meaningful work, belonging to a community and control over one's contribution are the basis of his ideology on the importance of *making*, applied in today's participatory nature of audience behavior in the age of web 2.0. Happiness according to Layard is associated with the quality of our relationship with others, furthermore has a close connection with one's self-esteem and meaningful nature of what we do. In this sense happiness is strongly associated with being active, making, creating, therefore contributing to the outside world and feeling that one can make a difference:

*“people are happier, more engaged with the world, and more likely to develop or learn, when they are doing and making things for themselves, rather than having things done and made for them (p. 226)”*, in this sense *“the pleasure in connecting with other people through creativity, and therefore feeling more connected with the world – becoming heard and recognized, and starting to feel that there may be some point in trying to make a difference – can occur through interactions with small numbers of like-minded people...(p. 233).”*

The latter leads to Gauntlett's fifth principle, that is connected to Illich's ideology on the joy which is allowed by the atmosphere where individuals contribute to the environment with their own visions, rather than having those shaped by already established and predetermined industrial or commercial institutions (pp. 224-225). The fourth proposition underlies the latter, as creativity in this sense is a matter of binding individual consumers together through making and sharing which ultimately pose challenges to the already established social institutions that rather serve as a principle that people are already given (pp. 223-224). The ideology of *making is connecting* takes a rather amateur view on audiences where engagement is strongly dependent on the freedom of meaningful participation driven by the social aspect of interaction and one's

recognition. Meaningful participation in the media means to make an individual mark when uploading videos on YouTube, writing about political views on Twitter or sharing a thought about the latest startup trends on LinkedIn. While the media theorist explains engagement with perspectives that push forward the reaction of simple human nature to being heard and seen, other perspectives showed similar results by one's meaningful engagement with media affecting the drive to take action (Dahlgren 2009; Castells 2012), however these views are more focused on how enhanced engagement with media creates meaning and value in offline actions and therefore contribute to society's political deliberation.

## 2.2. Civic Engagement in Spreading Media Across Multiple Channels and its Interpretation in Online Learning

The spreadable model in Jenkins et al.' interpretation takes a different angle in explaining audience engagement in the current media landscape (2013). Unlike Gauntlett, Jenkins et al. move away from the interpretation of audiences as amateurs who are engaging in online activities through creativity and rather define them as individuals who through their engagement with media are actively reshaping content provided by media companies (2013). According to Jenkins et al., this poses challenges to the corporate world's initial idea about audiences being *couch potatoes* and shift the focus towards a more active contribution from the side of individuals as professionals who for their own needs actively contribute to the corporate environment (Jenkins et al. 2013: 52-54). Sennett argues that Web 2.0 and companies who belong to the new technological shift are likely to recognize that audiences are not necessarily motivated by tangible ways, but by the recognition, reputation and their feeling of pride in contributing to the whole have major effect on one's engagement (Jenkins et al. 2103: 76). This is closely associated with Layard's perspective on happiness that apart from being linked to the quality of human relations also relates to people perceiving contribution to be meaningful and under their control which ultimately impact on their motivations when taking actions (Gauntlett 2011: 226).

Perspectives on participatory media call for understanding audience behavior in a broader sense. When audiences have opportunity to actively contribute to media texts online, they are likely to get feedback from peers on their actions. This can be a share on Facebook, a video on YouTube, or a Tweet on Twitter, everything they produce they are expecting a sense of caring from others. Why real-time feedbacks wouldn't matter in online learning then, which is based on the same ideology of online activity in the age of Web 2.0 from audiences who are used to having such engaging experiences?

According to Jenkins (2014), those media companies that lock down access to their content miss out on what audiences really want, which is creating and sharing meaning in the world. In this sense, the consumer is the one who is engaging the other consumer with the content and not corporations that initially create, however if the conversation between consumers is locked down by restrictions, the *spreadability* of the content is devaluated by hierarchical institutions. Jenkins (2014) understanding of participatory culture is on how we move towards building an ethical framework around media ecology where the collective distribution of media content is not limited through certain layers of power. However, making audiences as influencers of any type of media content in the networked culture is not so obvious in online learning. Just like one-to-many type of media, education in traditional classrooms tends to see students as collective masses rather than individuals. How does online education change the way audiences in the new media ecology perceive learning experience to be meaningful and engaging?

It is interesting to look at Jenkins (2014) and Jenkins et al. (2013) idea of participatory culture as part of today's media corporations that are likely to push the ownership to audiences who spread media content in their network and take the concept into the field of online learning in organizations. If, as Jenkins explains, audiences were creating a sense of value when spreading that content across multiple media (2014), wouldn't they create an enhanced value around learning content if the ownership were theirs to control? Would they become more engaged if online learning systems allowed them to belong to a learning community where interactivity is an essential part of a more hands-on learning experience? Where would the limit be where learning needs to be obligatory for employees in organizations but it would still apply methods from the spreadable model, so that engagement remains and learning is still effective? Does this mean that learning needs to happen as part of a more informal culture where participation and collective ownership is not limited by the grassroots of power? How does the commercialization of online learning systems would have to adapt to the changes in the media ecology and a more participatory culture in organizations? Spreadable media is only possible when power structures allow ownership to audiences, would that mean that organizations have to rethink the environment in which the socialization of employees happen, so that learning becomes more participatory?

According to the context of contemporary participatory media perspectives - Gauntlett's ideology on *making is connecting* (2011); Jenkins' interpretation of participatory culture (2014) and Jenkins et al. theory of spreadable media (2013) provide with an appropriate framework for discussing offline and online learning with concepts such as, (1) the importance of being

seen in one's motivation and engagement, (2) the dynamics of meaningful contribution with the perceived level of autonomy, (3) the value of interactivity in gaining hands-on experience and (4) the characteristics of broader context in which participation becomes performed by individuals. The next section of the dissertation will provide with deeper understanding of the literature of online learning, which is indispensable to address in order to provide with contributions with the above-mentioned concepts.

### **3. Literature Review**

#### **3.1. The Focus of Investigation**

There has been an extensive amount of research on the field of online learning where effectiveness of online learning has been studied in comparison with traditional learning. The literature review will explicitly discuss concepts of the constructivist process of learning, the socio-cultural view that underlies the importance of collaborative knowledge creation, the process of knowledge management and the role of web-based technologies in their development, in order to stress the need for studying the effectiveness of online learning associated with interactive features. According to the literature, engagement with online learning is strongly connected to the interactive and participatory features of courses, calling attention to include such characteristics into the implementation design. After looking into studies that stress the importance of interactive learning - interaction with the teacher and peers - and investigate the research methods that have been used and the results from the empirical data, we will arrive to the current standpoint on organizational knowledge management and the rapid expansion of Learning Management Systems that push the need for understanding classroom and online learning experiences, motivations and engagement from a point of view of individuals.

##### ***3.1.1. Shifting from the “What” to the “Why” of Learning***

Mohamed Ally argues that online learning educators need to use a variety of learning theories that are adapted to the digital age simply because effectiveness of online learning is associated with both internal and external motivations of students (2008: 18). Learning materials should be motivating, facilitate the process of information, support individual needs as well as interaction with others, provide support and feedback, facilitate contextual and promote meaningful learning (Ally 2008: 18-19). The chapter discusses four major schools of learning; we will however emphasize two of them, which allow us to understand the changing perspectives on learning that promote passive or active involvement of students. Early online

learning methods applied behaviorist approach to learning that assessed knowledge as an observable and measurable change in behavior (p. 19). This is relatively easy to assess with tests, quizzes as according to behaviorists the change in behavior indicates whether the knowledge has been acquired in forms of response. Cognitivists on the other hand shift focus from assuming learning as an external process, but emphasize it instead as a mechanism that interferes with internal processes, such as motivation or capacity. Constructivists thinkers, Cooper (1993) and Wilson (1997) assume that learning is better carried out when individuals contextualize learning through their own observation and interpretation therefore they can more efficiently add personal meaning to what they learn and personalize information into their knowledge (Ally 2008: 19). Ertmer and Newby (1993) taxonomy for the schools of learning indicate that factual knowledge is a response to the “*what*” type of learning that is facilitated by the behaviorist approach (Ally 2008: 20). Cognitivists, who interpret knowledge as an internal process that involves a mixture of reflection, memory, motivation and thinking (p. 21), challenge students with strategies that make them reflect on the “*how*” of learning processes. Strategies that promote a more contextual, situated, embodied-learning, point to the direction of the constructivist view on learning, the “*why*” of learning (p. 20). Personalizing information into the previously acquired knowledge therefore is necessary for contemporary learners in online education, since personalization and control over contribution seem to influence their activity to be not only contextualized therefore more effective, but also perceived to be meaningful:

If the online learning interface, and learning materials are used in a way that they support a more constructivist way of learning, which is giving control in learners’ hands, allow them for contribution and let them contextualize learning so they can use the knowledge for real-life, then engagement with learning is increasing, because it becomes more like a personal commitment. Constructivist approaches therefore are crucial to make learning engaging by building structures in learning that allow individual information personalization but how does effective knowledge creation happen from social and cultural point of views?

### ***3.1.2. Collaborative Knowledge Creation and its Equivalent for Effective Knowledge Management***

Drawing on the social and cultural *embeddedness* of learning grounded in the socio-cultural theories of learning of Vygotsky and the theories of communities of practice, “*learning is an inherently social and participatory activity* (Jaleel & Verghis 2015: 8)”. This perspective goes further behind promoting individual knowledge creation, as it pushes the influence of

collaborative knowledge creation in acquiring information more efficiently as part of a knowledge creating culture where shared ideas help provide in-depth meaning. The social development theory by Vygotsky states “*social interaction plays a fundamental role in the development of all cognitive abilities including thinking, learning, and communicating* (Leonard 2002: 177).” This is determined by the concept of the zone of proximal development that is mainly influenced by providing social learning context for growing generations at an early age, apart from encouraging the development of their individual problem solving skillset. The lower zone indicates children’ ability to think and solve problems individually, the higher zone on the other hand suggests the parents’ ability to create an environment where children can collaboratively solve tasks in the respective social and cultural context (p. 177). Web-based technologies play a key role in the collaborative production of knowledge (Jaleel & Verghis 2015: 8), as they are able to support individual and collaborative knowledge creation processes with a relatively easy-to-manage interface. In order for knowledge creation to happen it is important to settle how the process of knowledge management occurs. Effective knowledge creation consists of two processes: through constructions of tacit and explicit knowledge. The difference between the two is that explicit knowledge is “*academic*” also known as the foundation of all information that is able to reflect on “*know-what*”. Tacit knowledge on the other hand is practical and reflects on the “*know-how*” insights on the respective learning field. The latter is often referred as the knowledge that is being understood and practiced without explicitly expressed as a form of act. This means that it is harder to codify therefore not necessarily acquired via words in textbooks, but in environments where the application of explicit knowledge is experienced as practiced in real-life scenarios (Smith 2001: 314). In organizational contexts, it is especially important that training approaches support the combination of explicit and tacit knowledge creation. This is simply because the explicitly learnt information about the product that needs to be sold or the marketing material that must be advertised appeal to a higher degree of knowledge retention that occurs when knowledge is practiced in real-life without explicitly thinking about the knowledge under practice itself. Since there is no one observable moment when tacit knowledge occurs, there is a need for a continuous collaboration and cooperation with other people who already possess skills that need to be taught. In this sense, tacit knowledge creation happens when learning is put into social and cultural contexts (p. 316). While explicit knowledge is easy to express in words, it is not surprising that it can be easily distributed by online learning systems (p. 317). The easy-to-distribute knowledge management is exactly the reason why organizations use online learning systems for, without critically assessing the importance of learning as part of a broader social

context where tacit knowledge ultimately develops. If, according to Sfard (1998), the Acquisition metaphor promotes learning *we are heaving*, which can be acquired from an asynchronous environment, meanwhile the participation metaphor indicates the *doing of learning* (pp. 5-7), wouldn't it lead us to question the effectiveness of online learning environments that only focus on having easy-to-distribute knowledge features designed in a non-interactive, asynchronous way? Open communication flow that allows sharing knowledge among learners is an important aspect to take into account when building an online learning system in an organization, as according to learners, "*the most rewarding and meaningful learning experiences are one on one* (Smith 2001: 319)."

Online learning research has been particularly interested in studying the effect of online learning on knowledge creation compared to the traditional, instructor-led learning environments. According to Jaleel and Verghis' study on online learning effectiveness, educators need to focus on building courses that enhance knowledge creation processes in secondary education. The study used a sample of 80 secondary students and set up an experimental group who was taught online and a control group that has learnt in traditional ways about the same topic. In order to find out if there is a diversity between the experimental and control group in knowledge creation ability through the four modes of knowledge creation, namely - socialization, externalization, combination and internalization - by using the statistical analysis of the data on student behavior; the study found that there is a significant difference between the two groups in all of the modes of study. In short, findings of the study suggest that online learning needs to promote knowledge creating culture that allows learners to collaborate and share ideas not only to contribute to a more constructivist knowledge management that helps students in the process of acquiring tacit as well as explicit knowledge, but because knowledge that is socially embedded, helps in promoting a more engaging learning experience (2015: 8-12).

### ***3.1.3. Wenger's Ideology of Communities of Practice and their Relation to Computer Supported Collaborative Learning Studies***

Wenger (1988) explains that our cultural, historical and social artifacts that developed over time and which we use in our gestures and words are what mediate through our ongoing social presence in *communities of practice* and develop knowledge as a result of social process. Learning in this sense happens in collaboration with those using the same cultural tools and knowledge becomes shaped by the communities' social, historical and cultural situatedness (Liljeström 2010: 31-32). It is interesting to look at how asynchronous and synchronous

learning environments can support or hinder engagement if we look at learners as members of Wenger's *communities of practice*. It would be logical to think that asynchronous content in online learning cannot support the construction of shared knowledge, since it forces individuals to interact with the medium but excludes teacher and peer participation in the process of shared knowledge creation. Computer Supported Collaborative Learning (CSCL) studies suggest a solution to the latter by building collaborative online learning environments that are to enhance group meaning making, so that the process of learning does not happen in an isolated way. These studies support the view that "*teachers must motivate and guide each student through on-going social interaction and a sense of social presence*", as well as promote interaction with other students via face-to-face collaboration mediated by the computer (Stahl et al. 2006: 2). A doctoral dissertation suggests that written conversation through online learning systems (*'text talk'*) is a good way to balance asynchrony with interaction and social presence. Asynchronous Discussion Forums are commonly used in online education as they allow a more flexible participation in discussions, as well as more equal contribution to collaborative learning, since everyone has opportunity to express his/her opinion without interruption, which could happen otherwise in traditional classroom settings (Liljeström 2010: 38). In other studies, students showed low commitment in collaborating with others, as they were more concerned about the information provided without showing particular interest in interaction with others (Liljeström 2010: 39-40). It became necessary to move away from quantifying interaction and measuring text-based collaboration towards why some students collaborate in Asynchronous Discussion Forum-activities and why others don't? Studies started investigating the external factors that might influence engagement with such features. They found that both cultural and social attributes of students; difficulty to engagement due to "*lack of shared context*" in discussion forums or the individual lack of capacity to work in collaboration with others are influencing engagement in collaborating with others through *'text talk'* (Liljeström 2010: 40). Most of the research on the field of Computer Supported Collaborative Learning demonstrated; that online learners need to feel that they belong to a community before they fully engage in collaboration. This does not only help them to increase their social presence and sense of belonging but also through which they develop a shared context where commitment to the same purpose is grounded in the online environment (Liljeström 2010: 41). Other studies reinforced the importance of the sense of belonging by proving social conversations, such as knowing about one's personal life impacted the process of learning in collaboration, furthermore shared experiences between students helped in contextualizing learning by building identities of the shared knowledge community (Liljeström 2010: 41-42). According to Lindberg and Olofsson

(2006), individuals on online teacher training courses only found peer help valuable, when they showed similar attitudes, such as “*willingness to adapt [...] in accordance with the student who was meant to help* (Liljeström 2010: 42).” According to Wenger “*meaningful learning in social contexts require both participation and reification to be in interplay* (Wenger 2009: 1)”, in this sense, not only the maintenance of shared social presence but individual preferences of learning are shaping engagement with online learning (Liljeström 2002: 42). Since online learning research is mostly about comparative analysis between traditional and online learning and how the strengths of classroom learning can be successfully implemented into an online learning environment, no wonder why interactivity and its effect on engagement has been getting a lot of attention. Since asynchronous online learning is a flexible way for those learners who would like to control their own learning paces since they neither have time nor interest in collaborating with others, studies reflected both on promoting the individual aspect of knowledge creation in today’s information society as well as addressing the sociocultural view on learning.

### 3.2. Interactive Online Learning Literature

Interactions indicate many different features in online learning. These features can support real time – in other words - synchronous experiences, such as collaborative learning in face-to-face chat rooms. Asynchronous features can include text-based assessment from teachers, such as grading and/or feedbacks or discussion boards between students and/or teachers. Apart from the importance of interactivity with teachers and students, studies indicated that online learning content can and also should be designed to be interactive. Janicki and Liegle (2001) collected a wide range of work from instructional design experts on the field and synthesized them into one list of ten crucial design concepts that are to enhance interactivity of the content with learners and create a more engaging experience (Swan 2002: 24). Consistent design, easy-navigation, audiovisual learning materials are all examples of how to make online learning content a more engaging learning experience for students (p. 24).

In order to get a wider picture of the importance of interactivity in learning and why it needs to happen in communities, the dissertation will present a number of studies that have been particularly concerned about the importance of teachers’ presence and peer interaction in online learning systems. By discussing a variety of methods for measuring interactivity, the collection of empirical data furthermore results and comparisons, we will begin to understand where further clarification is needed, that will be provided by contributions from the analysis of qualitative data in Chapter 5.

### *3.2.1. The Importance of Teachers' Presence in Online Learning*

According to Short et al. (1976), asynchronous media are “*less capable of representing the 'social presence' of participants in online courses*”, because “*they support fewer affective communication channels* (Swan 2002: 25)” as immediacy behaviors – in other words, the “*perceived psychological distance*” – are harder to represent in text-based, asynchronous learning environments (p. 35). This called the attention to look into the importance of teacher's presence and changing role in virtual classrooms. It has been extensively studied why teachers' presence is crucial in the process of learning, while other studies were more concerned about the changing role of teachers who work in virtual classrooms (Swan 2002).

Artino and Stephens (2009) argue that the reason we need to understand teachers' role in the engagement with online learning is because secondary and higher education are commonly using online learning either in itself or as a combination with face-to-face classroom teaching in order to support “*diverse need in learning* (Omar et al. 2012: 466).” According to Sun, Tsai, Finger, Chen and Yeh (2008), the attitude of learners towards online learning is core to understand why and how students engage with online learning (Omar et al. 2012: 467). Since engagement with learning is shaped by – among other factors - the presence of teacher, studies started to look at how learners' attitudes are influenced by e-mentoring in online courses where learning usually happens in isolation. E-mentoring can be used to facilitate learning process by using online chat rooms, emails through asynchronous learning environments and face-to-face mentoring through synchronous ones.

In a representative study that was using questionnaires to find out the relationship between learners' attitude towards e-mentoring, Likert scale was set up to measure reactions in both cases where students could respond from a scale of 1 to 5 (p. 470). Results based on factor analysis showed that there is a significant correlation between learners' attitude and e-mentoring. This underlines the importance of learning in a social process which we discussed above, since the study demonstrated that the more learners are engaged with their own self-paced learning are also the ones who showed more willingness to engage with e-mentors and activities such as chat and emails, that teachers used in order to help students' learning processes. This also explains that students who care more about their learning, engage with e-mentors who they see are valuable sources of knowledge, thus are able to successfully facilitate their learning curve and contribute to their development (p. 473).

Other studies investigated the role of teachers in the motivation of studying and its effect on learning outcomes. Studies found that those students who interact with peers and teachers are more satisfied and get higher grades (Lindblom & Siewertz 2014).

Furthermore, teacher and student relationships were assessed in web-based education with action research and the study demonstrated the importance of teacher as the main contributor to enhance learning in a social context (Lindblom & Siewertz 2014: 14). Being both the authors of the article and teachers running the online courses provided with continuous reflections on their own experiences in action while actively participating in changing situations such as running online courses and assessing students' feedbacks by emails, course evaluations and posts (p. 6). The method of action research was a reliable way to get a broad view on learning experiences of students in online environments and conduct it as part of Wenger's ideology on "*community of practice*" which is important to settle if we wish to understand attitudes and reactions by students especially in an ever-changing, dynamic environment.

### ***3.2.2. The Importance of Peer Interaction in Online Learning***

Interaction with students within online learning systems has been the most discussed area of the literature associated with online learning effectiveness. One of the greatest researched fields of the importance of peer interaction in web-based education has been conducted among distance learners (Chickering & Gamson 1987; Kumari 2001; Fulford & Zhang 1993). According to Rourke et al. (2001), social presence and interaction with peers are the most important contributors to a successful online learning community where knowledge-building activities are not only effective but also engaging (Swan 2002: 26). Quantitative correlational analyses demonstrated positive association between students' perceived interaction with peers and teachers and their satisfaction with online courses (Swan 2002). Apart from teachers' presence, immediacy research in online learning has also been concerned about the social presence of students and their tendency to reduce psychological distance among each other in the virtual classrooms (p. 42). According to Danchak et al. (2001) and the equilibrium model of the development of social presence, "*as soon as affective communication channels narrow, immediacy behaviors increase in order for a desirable, equilibrium level of social presence to be achieved* (Swan 2002: 42)." This has been underlined with a study that showed how students are replacing affective communication channels by engaging in verbal immediacy behaviors, which stress the importance of interactivity and how students strive to maintain it in order to belong to a community (p. 43). On the other hand, interactivity can influence performance in an online course, which has called the attention to measure the quantity and quality of

interactions among students in an extensive survey in order to link the extent and nature of interaction and sense of presence to how these impose effect on students' perceived performance in online courses and proved strong relationship between the dependent [performance] and multiple independent [interaction and presence] measures of the study (Picciano 2002).

If we take a look at current trends on a more participatory new media landscape and its relation to education, there is more emphasis on the contextual factors that influence individual engagement with learning. This means that factors such as social acceptance and acculturation are particularly important to settle, in order to enhance belonging to a community so learning happens in a social environment and affects learning outcomes dramatically. In the current media landscape, engagement with new media and its effect on pedagogy has also been discussed (Yu et al. 2010). Notably, individual engagement with online social networking and its effect on university students' learning outcomes were initiated by Bandura (1977) who demonstrated that social acceptance influences one's active engagement which "*functions as an initial motive for achieving desirable learning outcomes* (Yu et al. 2010: 1495)". Personal social networks are not only important in academia but also in organizations where learning is just as affected by social acceptance, acculturation and belonging as outside of work contexts. No wonder it has recently called the attention to understand engagement with learning in organizations apart from the rapid expansion of Learning Management Systems used as the sole business-training solution.

### 3.3. From Academia to Organizational Online Learning

Participation in higher education has different motives than working in organizations, therefore engagement with online learning in case of the latter needs to be handled from a more contextualized perspective. Studying in universities is an individual choice which will ultimately affect on motivations with using online learning in itself (Lindblom & Siewertz 2014: 7-8), however organizational online learning is different in a sense that the learnt information needs to be put into practice, therefore learning should be even more focused around collaboration, cooperation and the understanding of the broader social context in order to make it engaging and effective. Argyle (1991) discusses the effectiveness of cooperative groups at work and emphasizes its positive impact on both explicit and implicit needs for cooperation in comparison with competitive groups (Furnham 2005: 399). In order for cooperation to happen, the company needs to promote such organizational culture where teamwork and collaborative knowledge creation are promoted and encouraged. According to

Nonaka, the way a company looks at knowledge and information processing has a huge effect on how employees engage with the mission of the company (2007: 165). Nonaka found that Japanese companies have a more holistic view on knowledge-creation, which means that the articulation and internalization of tacit knowledge into one's knowledge base is not only a result of a more successful teamwork but it also depends on personal commitment of sharing tacit knowledge and the drive in contributing to others' successes at work (2007). He assumes that *"teams play a central role in the knowledge-creating company, because they provide a shared context where individuals can interact with each other and engage in the constant dialogue on which effective reflection depends (p. 171)."* This is especially important if we take into account that knowledge-creation and the effective use of tacit and explicit insights differ from individual to individual when it comes to applying these at work (Smith 2001: 313). It is likely that companies use different techniques to teach tacit and explicit knowledge to train employees and the effective use of these in practice are influenced by many external factors, however *"supportive, interactive learning environment built on trust, openness and collective ownership definitely encourage knowledge acquisition and sharing (p. 319)."* Thanks to the ongoing digital revolution that – among others - effects knowledge-creation in organizations, the convergence of work and learning resulted in using online systems for employee training and it is *"set to thrive in corporate settings at a pace will not be matched in traditional settings (Mason 2005: 323)".* *"Employee education is not growing a 100 percent faster than academia, but 100 times – or 10.000 percent - faster (p. 323)".* Organizations are innovating their training solutions in line with today's demanding knowledge-based economy and quickly adapting their methods according to the shift online education is viewed and delivered today (Urdan & Weggen 2000: 2). The need for a shift from traditional training to web-based one can be explained by the characteristics of today's knowledge workers in the globalized, competitive business world that require more flexibility and adaptation in learning, meaning that *"modern training methods need to reflect these changes in lifestyle (p. 5)."*

According to Urdan and Weggen (2000), *"the true power of the web lies in its ability to create collaborative learning communities that introduce real-time human interaction (p. 28)"*, however a study in Training Magazine from 1999 shows that the percentage in which students were interacting with others online indicated a decline from previous years. Apart from higher user retention, motivation and engagement with online training; using interactive learning elements as core in organizational online learning outsources most of the issues that are surrounded by online training and knowledge-creation in organizations (p. 28). There are only

few studies that were particularly focused on studying organizational online learning in relation to employee engagement. According to Joo et al. (2012), sense of teaching and cognitive presence that promote the need for interactivity and participation are big part of student satisfaction and learning persistence (p. 112). Another study used a large-scale empirical survey to understand what motivates employees in organizational online learning (Garavan et al. 2010). Findings of this study expand on theories of Hertz and Williams (2009), who assume that particular individual and situational factors influence participation in online learning (Garavan et al. 2010: 156). When conceptualizing participation in online learning there are many different angles we can approach in terms of what factors influence engagement. Self-directedness has been associated with age and gender characteristics and it has been found that younger employees are better self-directed towards online learning than their older colleagues (p. 157). When studying contextual factors that influence participation, the theories of reasoned action and planned behavior are good frameworks to study motivational and contextual factors that influence participation, as *“self-efficacy and learner motivation may be particularly salient in the e-learning context (p. 156).”* On the other hand, perceived situational barriers and enablers can hinder or facilitate participation. It is not surprising that technical constraints can hinder motivation, while personal support can facilitate engagement, however perceived barriers and enablers directly impact self-efficacy *“through their influence on how learners believe that they can cope with such barriers or capitalize on enablers (pp. 158-159).”*

Organizational online learning has been particularly concerned with technical and implementation issues, however as the first part of the literature review suggests *“people remain the most influential element of any technology undertaken (Sutton 2003: p. 1)”*. It has been suggested that instead of looking at online learning applications, we need to focus on gaining understanding of the *“application domain where [...] systems can be employed.”* According to the study, we need to better understand with measurable success the application domain in which online learning is to be introduced (p. 3).

Conceptualizing the importance of interactivity in online learning as part of the application domain where individuals perform - or in other words – looking at interactivity as a core element of collaborative learning, taking into account the concepts and values of the organizational culture, where the act of learning is performed by the individuals – are crucial to understand how and in which ways individuals engage with learning.

### 3.4. Calling for Qualitative Research on Perceived Interactivity for Studying Motivations and Engagement

Online learning literature is mostly concerned about students' engagement and motivation with learning, however there are relatively small number of studies, which include these factors in their research when looking into online learning effectiveness (Noesgaard & Orngreen 2015: 281-282). This dissertation is meant to extensively address those studies that take these factors into account: based on the extensive description of the literature on the field, starting from the role of interactivity in regards to online learning in secondary and higher education and how it has been studied and measured all the way to how organizational online learning has been investigated in recent years, we arrive to an understanding that measuring effectiveness should be different for work-related context than for universities because in an organization, application of the learning material into the job role, as well as its effect on business results are crucial to understand (p. 282). According to an explorative review on methodologies in the online learning literature and the extensive overview on the field described above, the most common way to measure effectiveness in both academia and organizational contexts, is using quantitative pre-, and post-test assessments and surveys (p. 283), especially because studying effectiveness of online learning has been more likely addressing comparative methodology with traditional classroom learning to prove that interactivity – as the biggest strength of traditional learning – can be effectively applied. Even though “*interaction is generally considered to be critical to the effectiveness [of online learning]*” (p. 286)”, the findings of this dissertation in the online learning literature are supporting Noesgaard and Orngreen’s review as the previous studies were investigating the “*if and or*” but very few looked into the “*why*” or “*how*”.

“*If*” and “*or*” solutions and processes are measured quantitatively, while the “*why*” and “*how*” questions can be more effectively answered by qualitative methods (p. 283). According to Noesgaard (2014), contextual factors might be more important to take into account; however, since those are complex and changeable in nature, they are relatively hard to study (Noesgaard & Orngreen 2015: 285). Based on the extensive review on the most common methods used in the online learning literature, the dissertation addresses a gap with respect to the perceived impact of interactivity in online learning from the point of view of individuals in academia and organizations and situational factors that might influence its necessity, hinder its impact and facilitate its importance. The emphasis is on “*perceived*” which can be studied by individual self-assessment in a qualitative semi-structured interview method, where learners’ preferences about the artifact – the online learning solution itself - makes us better understand their

experiences, motivations and engagement in offline and online learning environments, furthermore helps us answer *how* learning becomes successfully performed by an individual in the process of socialization within an organization.

## 4. Methodology and Method

### 4.1. Case Study Approach for Studying Complex Phenomenon within its Context

Holistic phenomenon, that offer deep empirical and theoretical insights on complex sets of attitudes about a form of action are most likely to be carried out by case studies (Feagin et al. 1991: 8-12). As we have seen earlier in the dissertation, quantitative procedures done on the field of interactive online learning offered insights on effectiveness of interactivity. We will now use case study approach in order to gain in-depth understanding about the complexity of offline and online learning from multiple perspectives including the contextual factors that influence, furthermore shape those insights and help us answer to *how* and *in which ways* research questions.

Bent Flyvbjerg argues (2001) that the predictive and stable requirements for sciences in order for them to *matter* carry social sciences away from studying complexities and multiple truths in social life. Flyvbjerg interprets Dreyfus' model of the phenomenology of human learning in stages - from novice to expert – and adds that there are recognizable differences in terms of how deliberation departs from rule-based actions into the highest level of intuition, where context-dependence indicates the hallmark for understanding the whole spectrum of human activity within its context (2001: 9-24). Ideally, social theory is characterized by being explicit, universal and abstract according to Socrates, furthermore discrete and systematic according to Kant and Descartes. Modern sciences supplement these criteria with the necessity of the theory to be complete and predictive in order to count as scientific (pp. 38- 39). It is especially the last criterion that differentiates context-independent nomothetic sciences from social sciences that are heavily context-dependent, which means that the focus should be towards understanding “*open-ended, contingent, relation[s] between contexts and actions and interpretations* (p. 43)”, instead of finding regularities. The issue with context-independent interpretations of an action that is driven by rules is that it does not align with the way actions are defined by those *experts* in social situations (p. 42). As Dreyfus points out, “*the context in which human beings pick out the everyday objects and events whose regularities theory attempts to predict is left out in the decontextualization necessary for theory, what*

*human beings pick out as objects and events need not coincide with those elements over which the theory ranges (p. 40)”*

If context needs to be excluded to be predictable, but the exclusion causes the theory to fail, how do social sciences achieve the Kuhnian ideal in defining their activity scientific at all?

Flyvbjerg (2001) suggests that predictions are not what social sciences should be striving for, instead of focusing on finding regularities, cases provide with throughout, context-dependent knowledge that offer more valuable understanding in the study of human activity (p. 72). Flyvbjerg's idea of practicing phronetic social science that contributes to understanding in-depth narratives of social actions is coming from the contemporary interpretation of the Aristotelian phronesis. Among the three intellectual virtues, phronesis is what balances instrumental and analytical rationality of two other virtues, the technical knowledge (techne) and the scientific knowledge (episteme) with value-rationality (p. 111). Phronesis in this sense is the point of departure in understanding specific actions in a chosen social domain and by getting insight on the action's actual consequences from the point of view of social actors, it will ultimately contribute to society's value-rational deliberation (p. 130). In terms of a phronetic social science, ten interviewees' perceptions of their learning experiences, motivations and engagement in offline and online learning environments invite the interpretation of the "*polyphony of voices* (p. 139)", that add with a contribution to quantitative research done on the field with what is happening in the current practices of offline and online education from people's perspectives with a special focus on organizational online learning; whether the direction towards a future where the current strategies of online learning permanently remain is desirable and how we can improve those practices to change it from the interviewees' points of departure (pp. 145-161).

#### 4.2. Interpreting Reality - Qualitative Case Study Approach to Study Motivations and Engagement Taking Into Account the Levels of Perceived Interactivity

Could we really say interactivity is what makes online learning comparable with classroom learning in terms of effectiveness if we lack in-depth understanding on how the term 'interactivity' differs from individual to individual?

The dissertation is taking an interpretive stance in describing the stories of informants. Even though realistic approaches tend to use a mixture of qualitative and quantitative methods, we will stick to interpretive qualitative method in understanding the under-researched phenomenon of offline and online learning. The ontological position of the dissertation is what Hammersley

(1992) describes as *subtle realism*, which stands for acknowledging “*the social world does exist independently of individual subjective understanding, but that it is only accessible to us via the respondents’ interpretations* (Ritchie & Lewis 2003: 19).” The need for a diverse set of perspectives is what contributes to understanding the so called “*multifaceted reality*”, but denies the aim for capturing one external reality as such (pp. 19-20). Our ontological stance therefore contributes to enrich our understanding of various perspectives on experiencing online learning and acknowledges the fact that respondents’ interpretation of the field of study and their diverse experiences may influence their understanding of the online learning artifact (p. 19). This is especially important standpoint so settle when analyzing diverse experiences with offline and online learning outside of respondents’ shared work-context. We already foredoom that online learning as an interpretation of the single artifact mirrors as many interpretations as there are respondents in the study. Our epistemological aim therefore strives to maintain as neutral as possible when interpreting those perspectives in accordance with the online learning artifact (p. 20). Reflexivity of the researcher is one way to outsource the problem surrounded by the fact that not only respondents’ interpretations are characterized by their understanding of reality but also the researcher herself. Interpretive practices which “*emphasize the importance of understanding people’s perspectives in the context of the conditions and circumstances of their lives* (p. 21)” are carried out by asking respondents of the study to reflect on offline learning experiences that allow us to gain their own understanding of learning in a *social way* before asking them to describe their motivations and engagement with learning offline as well as online. The research will be grounded in the stories of the interviewees, however will utilize conceptualizations between certain points that are my own reflections (p. 21), in order to provide with contributions to existing research on the field.

#### 4.3. Sampling and Data Collection In Between Stake’s Instrumental and Intrinsic Case Study Research Approaches

In order to reach valid interpretation of the single case, I have chosen a Danish international tech start-up, Clerk.io where the number of employees was eighteen at the time when the research was conducted. Clerk.io sells software add-ons to online businesses that increase their sales and conversions by integrating personalized product recommendation functionalities that use the most advanced technology, called the machine learning. At the time of the investigation, I was working as the Human Resources representative of the company, hiring and on-boarding new employees and developing existing ones. I have asked a representative amount of ten employees who are working as sales associates/executives for different markets to participate in order to reach a contextualized, in-depth understanding between their learning preferences

and their environment. The context where the research was conducted offers insights on employees' reflections on each other and their perceptions of the environment around them. In order to understand the rationale behind the selection of the sample and the collection of data for studying online learning, I suggest a middle layer of two extreme qualitative inquiry approaches for studying case studies:

Robert Stake (1995) identifies three categories in which cases can be classified: (1) instrumental, (2) collective and (3) intrinsic. The instrumental approach often handles the case as a secondary interest of the researcher as it serves to facilitate the understanding of a topic of interest outside of the case's context. The collective case study approach is similar; however, it is more focused around understanding multiple cases rather than a single one. In both claims the ultimate goal is to use the case(s) for getting insight on a phenomenon outside of the context of the research. Intrinsic case study approaches allow researchers to investigate the uniqueness of a single case therefore the chosen area of research is often associated with the researcher's drive to explore her field of interest. The aim for intrinsic case studies is not to deduce generic explanations, but rather to scrutinize the context of the case at a high extent in order to reach the researcher's personal goal in understanding the particularity of the chosen field of study (Baxter & Jack 2008: 547-549). This dissertation is using a middle way between instrumental and intrinsic case study approach in terms of choosing the case of Clerk.io for investigation, as the purpose of the case is both (1) secondary in understanding motivations and engagement with offline and online learning from the point of view of people's perceptions on interactivity, (2) serves a personal interest in investigating the unique context in which the case is set and (3) contributes to previous research with an in-depth understanding on interactivity as rather perceived than measured. Even though instrumental approach in Stake's sense would be rational to use as a framework, this dissertation builds on Flyvbjerg's phronetic methodology (2001), which goes against the rigorous necessity of the instrumental approach in deducing theories from the data. My aim is not to interpret from informants' answers whether interactivity is useful or not in online learning, but rather to (1) contribute with *why* and *how* interactivity is useful with more focus on (1/a) contextual and situational constraints and enablers, (1/b) in a company with its uniqueness— in other words - a case of an organization that has been under-investigated.

#### 4.4. The Process - Semi-Structured Interviews in Accordance with the Case of Clerk.io

According to Denscombe, interviews are in between the continuum of *unstructured* and *structured*. The former is close to observation, while the latter involves close questions that

serve similar purposes as questionnaires for the researcher (2007: 176). The purpose of the semi-structured interviews is to encourage participants to answer with their own words by creating an interview situation that is rather conversational and informal in nature. According to Willig (2001), in case of semi-structured interviews the questions are pre-generated, however the aim is to engage in in-depth discussions with participants therefore the order of the questions depends on the situation of the respective interview (Seamon & Gill 2016: 12). Semi-structured interviews' efficiency also depends on the nature of questions asked (Cohen et al. 2007: 415-416), in our case open-ended questions were used in order to assess what interviewees experiences, motivations are, furthermore how they engage with offline and online learning. Kvale suggests (1996) that the researcher is responsible for keeping up the conversation by putting forward the aim of the research since interviews are not necessarily "*reciprocal interaction between two equal participants* (Cohen et al. 2007: 422)." In order to decrease the sense of inequality between participants, and me as the researcher each one of the informants was informed about the purpose of the study that – among others – are to make their organizational online learning more effective. This decreases the possibility for refusing to be interviewed, dislike the topic and becoming frightened of the consequences of the research (Cohen et al. 2007: 424), as outcomes will ultimately benefit their development. Through Field and Morse's (1989) list of preventing problems throughout interview situations (Cohen et al. 2007: 423), the ten interviews of the Clerk.io case were set up in respondents' homes, so the occurrence of interruptions from noise and inconvenient situations were minimalized in order to reach a more in-depth understanding of participants' beliefs. As Cooper and Schindler (2001) suggest, in the introduction of the research, apart from explaining the purpose of the study and how they will benefit from its conclusions, the duration of the interview, the scope of the project and ethical issues were covered in order to put interviewees at ease, and decrease their doubts (Cohen et al. 2007: 426). Each interview lasted approximately 35-40 minutes with employees of Clerk.io, and all interviews were recorded in order to collect all data necessary for a more detailed analysis. Voice recordings are unable to *show* the true nature of the social encounter, as body language is just as important as verbal interactions (p. 426). In our case however, neither the sensitivity of topic under discussion, nor the need for capturing the social context of the encounter turned out to be necessary.

#### 4.5. Limitations of Case Study Research and Suggestions for a Phronetic Approach

Case study research is heavily contextualized and detailed, which is both its strength and weakness. On one hand, contextualization at a specific time and space allows the researcher to

investigate the broader social context in which the research has been done by selecting a representative amount of interviewees from the same company that leads each one of them reflect on not only each other but also the environment where the learning as social action happens. On the other hand, the nature of case study research may lead the researcher to the lack of generalizability of one single case to other cases, meaning that theories drawn from data would not necessarily accord with similar investigations in other cases (Bhattacharjee 2012: 40). Deducing conclusions from employees' perceptions about the online learning artifact would lead us to heavy generalization, however the purpose of the study is to interpret participants' attitudes about the phenomenon and draw up concepts that help seeing the links in between answers.

In the beginning of the process, the interview topic and how the questions are structured from being more classroom- to online learning - oriented, were settled down. All of the interviewees were informed about the research orientation of the dissertation, meaning that they were well aware of the main purpose of the questions, which is – how the nature of interactivity becomes important in the process of socialization in organizations. In case of qualitative research, participants may be introduced by changing their names if the topic's sensitivity would otherwise stop them from providing as detailed and rich data as possible. Informants under study, furthermore the management of Clerk.io agreed to use real names, as they all acknowledged that the topic's sensitivity does not require respondents' and the business' confidentiality. In order to make the interview situation comfortable and easy to follow for the interviewees, I started with a specific question, which is simple to answer to, then more specific, semi-structured questions about experiences, motivations and engagement in learning followed with the focus on interactivity provided by social encounters of teachers and other students.

In the analysis part of the dissertation we will look into attitudes and experiences of the interviewees under study and conceptualize the answers according to two big categories, namely – classroom learning and online learning. This gives us opportunity to dive deep into the entire source material and see links between different categories as well as diverse answers from the individuals. The categories will be narrowed down into sub-categories that allow us critically analyze the answers with the literature and theory section of the dissertation. This will provide with a clearer explanation of the research questions and exploration of further research that will be suggested based on the conclusions of the study.

Within the two main categories, we will analyze teachers' presence and peer help in terms of the perceived level of interactivity with experiences, motivations, engagement in order to find

out how important interactive learning really is in organizational contexts and how contemporary learners would like to learn online.

#### 4.6. Scrutiny of Sub-Categories - Experiences, Motivations and Engagement for In-Depth Contextualization

I realized throughout the literature review that motivation and engagement with online learning in relation to interactivity are used as synonyms but there is a significant difference between them, especially if we analyze their relation as coordinative to perceived level of interactivity.

Experience in the context of the study indicates the first insight and general attitude towards classroom and online learning that help us better understand later the cases where they felt motivated, and the level of engagement based on those cases. The terms of motivations and engagement need to be clarified in terms of what they indicate in the context of the study. While motivation is what people feel when they are aware of the reward they will benefit from when taking an action, engagement happens without a necessity for rewarding. Engagement is somewhat a higher level of motivation where attitudes about a form of act can be observed.

Motivations in the context of the study are therefore those reactions where employees know that they will be rewarded after completing either university or an online learning course by some kind of feeling of accomplishment. In case of university learning, motivations can revolve around either satisfaction of completing an assignment, interest in the topic itself or getting a status from the university. In order to better indicate motivation of the employees, I asked them specifically to tell me when, how and why they felt that teachers' presence and peer help motivated them in learning. In case of classroom learning these were most of the time specific cases they shared, while in online learning these motivations were most of the time motivations with posting a question on a discussion board, or having asynchronous communication with the teachers online and how these experiences made them either motivated or demotivated with learning. In case of engagement, the answers reflected on either experiences - which scenario made them more engaged and why, or suggested improvements based on critical thinking about how they would have felt engaged in an "if/then" scenario.

## 5. Analysis – Contributions with Research Questions

### 5.1. How Does Interactive Learning Drive Motivation and Engagement?

The question remains how the social element in learning contributes to a motivating and engaging learning experience. The dynamics between traditional media and classroom learning

as well as spreadable media and online learning call for an elaboration with empirical analysis based on representative data. The next section of the dissertation will provide with an extensive dialogue between Jenkins' *participatory culture* (2014), Jenkins et al.' interpretation of *spreadable media* (2013), Gauntlett's approach on *making is connecting* (2011) applied on the field of online learning, the core concepts of previous research as well as concrete empirical data provided by the informants under study and their deeper meaning in relation to the different sub-categories. This will ultimately serve as a contribution in terms of how the importance of interactivity accelerates when learning is being perceived as obligatory or voluntary, in which ways teachers and peers contribute to enhance external motivations, how the perceived level of control over learning impact on engagement in different learning environments, furthermore how the broader social context impact on perceiving learning to be engaging.

## 5.2. Experience with Learning in Classrooms

Classroom learning is often characterized synchronous, as there is an ongoing social presence of students and teachers where interactivity happens in form of real-time communication. Collaborative online learning studies depart from interpreting online learning as asynchronous in comparison with classroom learning as the latter has a more obvious space for interactivity. Gauntlett (2011) argues that one of the core reasons for *making is connecting* is the drive to participate in a community and this ultimately encourages people to engage in sharing and adding a contribution to the outside world. In this sense, interactivity is strongly associated with participation. In learning however, "*the-sit-back-and-be-told*" (Gauntlett 2011) type of education does not necessarily mean that participation is less likely to happen. How does being seen affect experiences being perceived good or bad and in that sense how do teachers and peers contribute to a more participatory experience in both classroom and online learning? In order to find the answers, informants were asked to assess their perceived level of interactivity in both learning environments, starting by sharing experiences with classroom learning:

*"Professor explaining with slides or other material support some topic and the class was listening to the professor while he/she was speaking"*, starts Sarah when being asked about what her experiences are from university learning. *"Classes with 800 people [...] not a lot of space for interactivity"*, continues Serena. Sam is on the same page as he adds, *"my classroom learning experience is not so interactive."* According to Nikolett learning in universities is *"very theoretical and one-sided"* and Fernando also finds the learning experience theoretical and adds, *"I think people can only learn stuff when being in a real situation."* Hamish's experience with university learning is *"going to lectures and doing the reading."*

This *one-to-many* experience of learning reflects on the lack of the personal contact between teachers and students that ultimately determine the experience being affected negatively. In which ways do the “*sit-back-and-be-told*” version of education in Gauntlett’s (2011) interpretation affect experiences in environments that are perceived to be less interactive? Even though classroom learning is generally associated with a lack of interactivity thanks to the large amount of students in lecture halls according to the informants, teachers’ presence is still an influencer on their experience with learning. This is associated with the desire of being seen individually that serves to better the experience in an environment that is generally assessed being asynchronous. Alison reflects on the latter by stating: “*teachers would ask broad questions and no one really knowing what to answer to them and it created some type of pressure and awkward situation...whereas teachers who were more willing to create more specific questions to specific people...then you knew something was expected.*” Half of the interviewees shared Alison’s concern which is to have only one professor for such large amount of students in university settings creates an unequal balance in learning pace of the individuals (Nikolett, Lisa, Sarah, Alison and Hamish). Bernard’s counter-argument to Alison further explains the necessity of being seen otherwise “*if you stuck into that environment repeatedly, it gets really boring.*”

When informants were talking about good experiences in classrooms, they mentioned small group assignments with peers where the learning environment was more synchronous and dynamic with “*people who think alike understand each other better* (Nikolett)” type of thinking. The sociocultural view of knowledge creation as a result of social process (Liljeström 2010) provides with a framework of learning in collaboration with those ‘likeminded peers’ using the same cultural, historical and social tools that allow them to share knowledge by more effective means (pp. 31-32). Empirical data provided by the informants under study underlies the effect of ‘like-mindedness’ in having a good learning experience however this will call for further elaboration of the perceived level of obligation in learning environments that affects motivations.

Based on the answers of experiences in classroom learning, we can assume that there is a general attitude about school learning as a theory-oriented, lecture based, and one-sided experience where teachers do not have time with students individually, which creates “*not so interactive, but rather academical* (Serena)” type of learning environment and a sense of “*this is what we learn, learn that...done* (Sam)!” All ten of the interviewees mentioned teacher as an important factor in having a good or a bad experience with learning in schools. Having bad

experience includes the teacher not having opportunity to interact with students individually and having lectures with many students creates a “one-way” learning (Sarah, Nikolett), which according to all of the interviewees leads to demotivation and lack of interest in the topic. This experience in Jenkins et al.’ sense provide with a framework of traditional media where one-to-many type of communication - in other words the lack of interactivity - (2013) produces lack of control over one’s contribution to be perceived as meaningful. In education however, lack of interactivity seems to affect the control over one’s learning pace and process, affecting experiences in a negative way. Before diving into the question how these experiences were being perceived motivating or demotivating, we will first look at whether online learning experiences in mandatory and voluntary scenarios provide with a more participatory experience based on perceived level of interactivity. How does the social element in online learning contribute to a *making is connecting* experience in Gauntlett’s sense (2011)?

### 5.3. Experiences with Online Learning

Fernando has been studying in online courses for a long time and has mixed feelings about the level of interactivity these systems offered and his experience with them. As part of his university studies in Brazil he was obligated to take online classes besides the traditional lectures. According to him, these systems offered interactive elements, such as discussion boards and teacher evaluation, but according to him “*it was a waste of time*”. I asked him about his other experiences with online learning where he had more freedom in terms of taking classes voluntarily outside of school and using interactive features within those learning environments, his experiences were more positive as he replied: “*it was relaxing to use that system (Coursera)...because I didn’t have that much obligation*”, however as he compares his experience with university online learning, he is juxtaposing his attitude with the perceived level of interactivity in the system which even though allowed peer interaction and teacher help and he did have the opportunity to “*ask right away from people...*”, but he adds “*I wasn’t engaged with other people in that scenario.*”

Nikolett shows similar experiences with university online learning compared to voluntary online learning. In case of the latter, Nikolett is still studying with the application called Duolingo that she used in order to learn the Dutch language. She has a genuine interest for the language having a Dutch boyfriend and willing to move to the Netherlands, however lacking time for going to classes to learn a language, she chose to try out with the online learning application that is well known for its interactive elements. According to her “*I feel like I am achieving something even if I only do five minutes of Dutch a day*”. Talking about what makes

her post a question to the discussion board, therefore participate in the social elements of the platform; she brings up some interesting aspects in regards to who is answering those questions and if that person can be trusted. Systems like Duolingo lack teachers' presence as the system heavily interacts with individuals in terms of feedback and assessment. These discussion boards allow students to ask questions from each other, but Nikolett explains that only those students can answer to questions who are already on a higher level of the courses, therefore can be trusted in terms of providing with appropriate answers. Organizational online learning according to her is also heavily dependent on who stands behind the platform. She adds that it does not necessarily have to be a teacher in that sense but someone who is promoted as providing the “*appropriate*”, “*updated*” information and has the “*right*” answers to the employees when being asked (Nikolett).

Another standpoint in regards to organizational online learning is coming from Lisa, who had great experience with online learning so far as she adds “*it made me successful in my work.*” Her first online learning experience was in United Nations (UN) where she worked as an intern and was on-boarded with online classes. She was emphasizing that UN's online learning system offered courses that allowed employees to apply for higher internal positions. When describing how the system worked, she mentioned many interactive elements that were dynamically contributing to better her learning experience, such as discussion boards, real-time feedbacks and live chat opportunity. According to her, knowledge assessment was regularly used in small steps, which meant that after each question employees were able to check if they answered correctly or not with explanation of why the answer was correct or incorrect. This particular interactive element of the system made her more confident in going forward with the course material and she also engaged with group learning scenarios outside of the system. Lisa explains that she prefers online learning in any scenario: “*I love it...just me and the problem.*”

Others had relatively bad experience with organizational online learning. Laurids summarized his experiences in regards to the perceived level of interactivity as being “*only one-way*”, Hamish's experience was rather “*non-relevant*” as he remembers when being employed by the British government and being obligated to take classes outside of his position which made the experience boring and confusing. Bernard was emphasizing the uselessness of these systems and the lack of structure behind implementing them efficiently. Having worked for many different companies that used online learning as the sole training solution allows him to have a broad understanding of learning online in different contexts. According to him, bigger corporations invest in online learning system solutions only because competitors are using

them, but they tend to focus less on structuring and managing these systems in the right way, which lead them to spend money on something that will not be exploited entirely.

Even though interviewees have had different experiences with online learning, in case of organizational online learning, they shared a common view on the role it played in their learning, as they all agreed on the system being used as a “*knowledge-base* (Laurids, Hamish, Bernard)” for the company where the “*information is accessible anytime, anywhere* (Alison)”, having “*a system to always go back to* (Nikolett)”, having an experience where “*you have learnt, you were tested, then you got feedback...it was a cycle* (Sam)” or “*having the most relevant content ready for yourself to look at is easier than asking old employees about the products who might be tired of answering to questions of newcomers* (Serena)”.

In case of online learning experiences, the perceived level of interactivity was mainly asynchronous. Almost half of the interviewees have had online learning experience from different universities (Fernando, Serena, Hamish, Alison) and/or from other applications, such as Coursera (Fernando) and Duolingo (Nikolett), some of them have already used online learning systems in organizations outside of Clerk.io, such as UN (Lisa), the British Government (Hamish) or Secunia (Bernard). Based on the answers of the employees, online learning experience is mixed not only in terms of the importance of the perceived level of interactivity but also in regards to online courses they were taking as either part of their university studies, organizational learning or simply voluntarily for the sake of their own development.

What can we assume based on the answers of interviewees attitudes with classroom and online learning in diverse settings and how these experiences are affected by the obligatory and voluntary nature of the learning processes taking into account perceived levels of interactivity?

### ***5.3.1. Summing Up Experiences in Both Learning Environments***

The “*diverse need in learning*” in Artino and Stephens (2009) interpretation serves as an understanding of how contemporary audiences of the participatory media are driven by different factors in learning (Omar et al. 2012: 466). Concluding the answers above, learning experiences are affected by being heard and recognized individually by the teacher in classrooms where learning is perceived to be less synchronous. Learning with peers is a synchronous process with small group of peers where synchronism serves with good experiences of being seen by “*likeminded* (Nikolett)” individuals. If we could add to Jenkins’ ideology on the experiences with media eroding from the importance of individual contribution

to participation (2014), the question would be how does being seen affect external motivations and drive engagement in both classroom and online learning environments? On the other hand, Gauntlett's interpretation of the pleasure of connecting through "*making and doing*" (2011) in education means to be able to control one's learning pace and that would ultimately affect the necessity of interaction with others. Fernando, whose experiences with online learning are good example to show the different levels of how interactivity becomes less of a good experience with the growth of responsibility, explains the latter. Lisa's great experience that is associated with being able to manage her learning pace, made her more confident and driven by using interactive features in online learning. This perspective serves as a contribution to Omar et al. and their study on the importance of e-mentors in online education. Those learners who are motivated on their own become more likely to interact with teachers and peers (2012: 473), however in our case the more learning was perceived as voluntary and self-paced, the more likely individuals like Fernando, Nikolett and Lisa engaged with using interactive elements, as compared to when learning has been perceived obligatory. Does this mean that being able to control learning pace is associated with motivations? This adds up with another aspect that needs to be discussed in more detail and calls for a deeper understanding of how internal motivation is associated with the external one: in which ways motivations, such as control over learning are affected by participating in the social elements of learning when it is being perceived mandatory and voluntary?

#### 5.4. External Motivators in Classroom Learning

In order to find answers to the question above, we need to look into how does being seen by teachers affect external motivations in both learning environments as well as what drives informants to interact with peers besides their "like-mindedness"?

Being seen in an asynchronous environment seems to be a prerequisite to individual contribution that is indispensable for good experiences with learning. In terms of teachers' presence in motivations with learning in schools, interviewees brought up either general motivators or specific examples from the past that indicated their experience being motivating: Sam thinks, teachers are good motivators if they put a different light on the assignment and encourage students to look at it in "*different ways*." Sarah suggests that teachers' presence in motivation depends on the teacher being "*known on the field*" and "*give space for open discussions*" as she shares her story: "...*he's way of teaching was to try and challenge us...it was an interactive way to carry on the lecture*." Serena also thinks that the teacher's personality affects her motivations with learning, as she shares a story where she was lacking excitement

about the topic in the first place, but having a teacher who was passionate about the topic and was “selling” it to students as “*the most interesting thing in the world*”, made her more motivated in learning. Another perspective regarding teachers’ personality is explained by LauridsLiker, as he remembers his Danish teacher motivating him in learning: “*my teacher back then was really charismatic and he knew everything but he was also one of the first teachers in my life who looked at you as a peer or as an intellectual being...and that was eye-opener for me...I respected him so much for it.*” Laurids continues his experience; “*he motivated me only by getting into a dialogue with me and showing me that he respected what I had to say.*” Bernard shares a similar story where the teacher’s awareness of him as an individual affected his motivation with the subject matter: “*...he recognized that I knew about chemistry...and started challenging me on that and pushing me individually which meant that even he was teaching a classroom of people, he was pushing me on my own...so like teasing me or pointing out that I wasn’t as smart as I thought I was...If he gave assignments to us, he would always change it a little for me...and this made me feel a little bit special...and I ended up getting really high scores in this class.*” Hamish also shares similar view on the importance of having the personal connection with the teacher and adds the importance of perceiving the teacher being professional and having expertise on the respective field of study.

Good experiences with classroom learning were strongly associated with the individual recognition of teachers in environments where learning has been perceived asynchronous between students and teachers. Motivations reinforce the importance of being seen however the description of informants’ answers above provides with deeper insight on in which sense this phenomenon motivates them externally in classrooms: encouraging to see things differently (Sam), challenging, being known on the field (Serena), professional (Hamish), charismatic, looking at students as peers (Laurids), recognizing individual skills (Bernard) are all examples of informants feeling empowered by teachers.

As we have previously discussed, Omar et al. argues that learners who are motivated on their own show more willingness to engage with e-mentors in the system (2012). In classroom learning this happens in reverse: the personality of the teacher seems to have a big impact on by whom students are encouraged to be seen by.

How would this particular phenomenon be interpreted with peers’ contribution to interactivity in motivations with classroom learning?

Fernando is explaining that when a topic seemed hard to digest, or less interesting and practical, he felt less motivated to learn on his own, and more motivated when having opportunity to learn together with peers. Laurids defines group learning as a scenario where classmates help each other through some of the hard topics. He shares a case where he was being afraid to fail in the subject, however felt much more comfortable with learning by sharing the feeling with others when studying for the final exam: *“we knew we had to use each other to get the most out of this and actually being able to graduate...it was a really good incentive to drive yourself forward as a part of group and make sure that everyone in the group passed.”* He also emphasizes that he was having the best experience *“both in terms of working and studying when I’ve been learning together with others...making sense of some of the tougher topics together with others for me it’s just much easier way of acquiring knowledge.”*

Nikolett has similar opinion on peer help in regards to her motivation with group learning as according to her these scenarios help *“translating hard-to-understand theories in a more understandable and clear way.”* According to Sam, *“group learning helps you get more information that you wouldn’t get by yourself, sources it in different way therefore it becomes motivating as all of a sudden you’ll have more knowledge.”* He shares a story of his marketing class in Copenhagen Business School where he was working on an assignment about a chosen company with a small group of students. He explains that being the assignment so practical and broad, there was a need to divide some parts in between them and share their knowledge in a dynamic way. As soon as the group begun bouncing ideas off each other, it started *“making sense and became interesting.”* While Fernando, Laurids, Sam and Nikolett emphasize their motivations with group learning when perceiving the topic tough, others question the quality of the group members, who either contribute positively or negatively to one’s motivation. Bernard emphasizes his motivations with group learning when having *“qualified”* peers in the class: *“learning with all those people who are qualified...so when you are learning how to use some tool, they all had knowledge on how to use [them]...”* meanwhile Hamish approaches the question from the other angle and shares his motivation being low when disqualified and power-hungry peers start controlling other individuals, affecting the dynamics of the group that is meant to be interactive. Another perspective of group learning mechanism is shared by Lisa, whose opinion on interactive learning is *“for the sake of competition”* and less about the knowledge-sharing that according to most of the other interviewees are to enhance the learning experience and get a more throughout knowledge. According to Lisa, interactive group learning may *“enrich each others’ experiences but not that much because everyone has his/her own*

*perspective.*” Serena suggests that learning in groups is helpful to formulate questions together where “*you find your answer yourself [...].*” She adds that group learning is a type of external motivation where “*you want to impress your classmates.*”

Moving away from the social element of group learning where either competition or impressment of others helped individuals with their motivations, two other perspectives were discussing the time element in their motivation: Sarah is more likely to define herself as an “*individual learner type*”, as she explains, “*I learn to pass the exam [...] I need to optimize my time and optimization is a solidary work.*” Even though she prefers individual learning most of the time, she still sees group learning as motivating in regards to gaining knowledge in the long run. She remembers a case in Bocconi University where she was explaining one of the toughest topics to her classmate and she admits that she still remembers that topic. According to her, “*when sharing...it helps in learning...but it’s a very slow process.*” Another interviewee drawing on the time perspective of learning is Alison who mentions a case where starting a project with another classmate way before she would have started it made her experience being motivating, as she explains: “*we have started working on the project way earlier than I would have done by myself...and that’s one of the best things in it...we were able to go in details...and we could also contribute positively to each other.*”

Informants had all different perspectives on how they perceived peers important in classrooms. Those interviewees who perceived peer help more motivating when finding the topic hard serve as a contribution to why it is important to balance tacit and explicit knowledge in collaboration with others. The more explicit the topic was perceived and the learning environment pressing, the more informants were willing to collaborate with peers. This motivation ranged from getting comforted by the group, acquiring more knowledge, competing with peers or impressing them. Control over learning in this sense is somewhat characterized by doing the learning, rather than having it (Sfard 1998). In respect to the focus of the study based on data of informants, perceived level of control over learning – or in other words *doing of learning* - impacted motivations with learning with peers in offline learning environments.

### 5.5. External Motivators in Online Learning

Even though classroom learning has been perceived less synchronous according to the informants’ answers, asynchrony in online learning environments represent an even more decreased sense of presence of others, as the “*perceived psychological distance* (Swan 2002: 35)” of teachers and students are considered longer. If we look at how audiences engage with media, asynchrony in Swan’s sense (2002) applied on the field of online learning would still be

a matter of concern in participation where one's contribution is perceived to be meaningful. In online learning teachers and students communicate through the so-called discussion boards where the objective is to clarify misunderstandings and ask for help. Teachers' presence in online learning is also associated with grading and giving feedback, although it has been perceived differently if that is effective, simply because it depends on how regular and instant the feedback is. External motivations with online learning can also relate to the systems' content being interactive and interviewees brought up some interesting aspects in regards to the perceived level of interactivity provided according to their experiences. How do online learning experiences that are perceived to be obligatory or voluntary affected their motivations with using interactive features in online learning systems?

It needs to be "*complex enough to really test your knowledge*", says Alison, when asking her about how online learning should be provided in order to make her more motivated with the content. She adds that the system should look like "*real life*", and would be motivating to know that there would be consequences of some kind. This could be test result being posted publically "*so there is some kind of incentive that you should do your learning.*" Continuing with Alison and her concern about time/motivation perspective, she mentions the downside of not having a teacher physically to control the learning progress, define deadlines or in other words represent "*time pressure*". Alison admitted that being pressured by the deadline is what makes her learning experience more motivating as leaving everything for the last minute affects her concentration as she starts feeling stressed. She added that online learning in some way is lacking the physical presence of a teacher who in many cases represents a pressure with indication for a deadline when an assignment needs to be finished. According to Alison, people like her who need more motivation in forms of "*time pressure*" won't be motivated with online learning as they leave everything for the "*last minute*" and do not learn as much as they would be willing to and/or are expected to. Serena also mentions a relevant aspect: "*teachers' presence in online learning would become more like an external motivation, in a form of pressure.*" Sarah admits that she is not motivated to use discussion boards in university online learning and she did not use them at all as when she had opportunity, "*I prefer to have a dialogue with the teacher or with other students directly.*" Bernard shares similar insights on the efficiency of having discussion boards in organizational online learning, he explains that "*there are already many ways people communicate with each other, like email...and to add another layer to direct communicate between colleagues as a soul way to communicate...it would be more likely to communicate externally about the training, such as email or just speaking.*" Asking Lisa about

the importance of a mentor in organizational online learning, she adds *“there is no point in having teachers’ presence in organizational online learning, if the online learning environment is set up appropriately, meaning it gives clear instructions and is easy to use.”* Sam and Sarah are approaching the question of having teachers in online learning from the assessment perspective: the *“feedback needs to be given instantly after the test”*, explains Sam when asking him about the importance of interactivity in organizational online learning. Apart from designing a content that is visually appealing and *“stimulates you going”*, he questions the purpose of online learning without interactive elements: *“what’s the point of doing something if you don’t know if you are doing it right or wrong?”* For Sarah, the efficiency of discussion boards is also a matter of getting instant feedback. According to her, if the feedback were not given after the test right away, *“I would still prefer the personal contact...personal contact is important in the sense of feedback from body language.”*

Using discussion boards for a different type of social action - which is interaction with peers in classrooms or employees in organizations - has been perceived from two different angles: Serena takes advantage of peer help in discussion boards when specifying something or clarifying information. She adds that her level of activity on the boards is influenced by how many people can see the content of these interactions and whether the teacher is also part of it: *“you maybe don’t want to admit if you don’t know something and to let everyone know...it’s like asking a question in front of the class.”* The other perspective is defined by Laurids who questions the voluntary/obligatory nature of these boards. He assumes that active presence on discussion boards in regards to obligation to perform for other peers is what influences his motivation with using the system regularly.

While good experiences with online learning were associated with the more control have been perceived over learning pace the more interactive features had been exploited, motivations with interacting with teachers and peers online were much more differentiated. *Text talk* in online learning is beneficial since students may interact without interruption (Liljeström 2010: 38). This objective however can be influenced by who sees the discussions (Serena). On the other hand, it has been demonstrated that in other cases students did not show motivations with interacting with others as they were more focused on the material (Liljeström 2010: 39-40). This underlies the importance of the content being provided as *“real life”* (Alison) that *“stimulates you going”* (Sam), however adds an important aspect of more willingness for interacting with peers and teachers outside of online learning when there is opportunity to do so (Sarah). In this sense the content being designed as interactive, that gives guidance and

feedback is stimulating in moving forward with learning where there are less other interactive features, such as discussion boards or face-to-face collaboration mediated by the computer. *Text talk* in our case however is only used for clarification and misunderstandings in order to gain much deeper control over learning, but where there is opportunity to interact offline with teachers and peers, interactive elements built in online learning systems will not be exploited. This particular phenomenon calls for attention to look at interactivity as part of a broader context where individuals in both offline and online learning environments perform the learning.

### 5.6. Engaging with Classroom Learning

If I summed up Jenkins et al. perspective on participatory media, I would say that we do things in the media because we are engaged (2013). What makes us engaged? The term social media indicates the answer: ‘social’. The social element has to do with engaging, simply because the input which we contribute with, has some sort of acknowledgement in forms of feedback. It can be a simple like, share or comment but it creates dialogue between two or more people who therefore build together the interactive ground on their social reality. What are those elements of learning that make individuals engaged in a classroom set up? What is engaging with learning for one individual and what is it for another? Does the ‘social’ element of learning in Jenkins et al. sense (2013) create higher engagement in case of online learning?

Asking informants about engagement with social learning in groups in case of classroom learning, Alison explains: *“if something seemed really challenging then I would just scare off, and I wouldn’t really engage with it, because it seemed too much, whereas the same project with the same difficulty level and I was working on it with somebody, then the two of us could look at small parts and bounce the ideas off each other and figure each step out...these times you always get feedback...these are the things that motivated me the most...and the things I felt more successful in during university.”* Another perspective of peer learning comes from Sam, who explains that learning in groups helps *“further or change or better your opinion”*, that makes him ultimately engaged with learning as he learns more when working in groups with other students. An interesting aspect of group learning is explained by Serena who is highly engaged when participating in groups: *“I am absolutely a person who likes to learn in groups, because I love the interaction and I like answering questions or having short problems that need to be solved...”* She adds that learning from books is more about memorizing and less about learning, however group learning scenarios enrich knowledge according to her, therefore she becomes more confident and engaged with the topic. Approaching the question of the

perceived level of importance of peer help in engagement with learning from the opposite direction, Laurids shares a valuable insight: “*in case of individual learning there is a limit of how far you can get, in my experience, because you are just sitting there alone with your thoughts and not having anyone to spare with.*” While some interviewees approach engagement with peer help in classroom learning from an encouraging perspective, others like Hamish and Bernard agree on the quality of the peer help and the consistence of the group members: “*only [with] likeminded individuals who learn at the same pace*”, says Bernard when asking him how peer help makes him engaged with learning. Hamish contributes with a similar thought: “*if it’s a person I don’t get along with and I am not interested in the topic, I don’t find that learning experience neither helpful nor engaging.*”

‘Like-mindedness’ has been associated with good learning experiences and served as an understanding of the culturally and socially embedded learning where *doing* the learning rather than *having* it (Sfard 1998) is facilitated by synchronous group learning scenarios provides with a more motivating experience. Besides the necessity of having a good dynamic with likeminded individuals in groups (Bernard, Hamish), engagement with group learning according to the answers demonstrates the necessity of having peers to maintain the social presence of others. The latter helps gaining more confidence in the sense that one is able to do the learning (Alison) as well as having peers to “*spare with*” (Laurids), bouncing ideas off each other (Alison), furthering knowledge and opinion (Sam) demonstrate the individual aspect of gaining knowledge with the help of peers therefore using the hard-to-understand-knowledge in a practical way, that provides with more confidence over controlling one’s learning pace, therefore creates a more engaging learning experience.

While peers contribute to a more practical learning experience, teachers are more associated as facilitators who provide with more explicit knowledge. *Having* the learning is just as important as *doing* the learning (Sfard 1998), however in case of asynchronous classroom environments the learning pace is being perceived less under control of the individuals. Being seen by teachers in classrooms turned out to be important for a better learning experience, and motivations with teachers were associated with how the teacher was like. How has teacher’s role been perceived on a deeper level?

Teachers’ presence in the engagement with classroom learning according to Nikolett is more about knowing that the teacher is a valuable asset to the personal growth and development. Based on Lisa’s experiences with teachers, she admits that she feels more engaged with learning

when hearing the teacher talking about his/her own experiences with the topic under discussion. Similarly to Lisa, Sarah also mentioned an important aspect of the personality of the teacher that affects her engagement. According to her, hearing the teacher being enthusiastic about the topic can definitely contribute to a more engaging learning experience. Serena continues: “...the actual value of having a professor and not studying from books...there is rather interaction and I need to be actively involved into something because I get bored when I am just passively involved.” According to Sam, teacher is who “informs you when you do something right...or wrong...[and] guides you through the process of learning”. There were other interviewees whose opinions on the importance in their engagement with teachers’ presence were affected by the perceived level of interactivity that the teacher has showed in the classrooms:

According to Laurids, “interactivity leads to a better learning environment” and only in such environment can make a teacher a huge difference. According to Bernard, “it depends on the teacher’s ability to that student individually and challenge them appropriately which is very difficult when you have 30-40 people in the class”. He continues that there are usually big differences between students’ knowledge on the topic and there are students who understand for the first time while there are others who need repetition. He asks hypothetically, “how do you keep the motivation of those who would have learnt it for the first time?”

Being seen by teachers individually has led to good experiences in asynchronous classroom scenarios, and the teacher being enthusiastic, challenging and open for interactions affected motivations with learning. The above answers entail that teachers who seem to be a valuable source of knowledge (Nikolett), share personal experiences (Lisa), heavily interact and involve (Serena), are able to guide students through learning (Sam) explain that teachers are recognized being important when they are perceived to be valuable asset to personal development. Teachers’ contribution to individual growth can be many different things, as everyone has diverse objective on why they learn. The latter standpoint reinforces the importance of looking into internal motivations of informants with learning in both offline and online environments. How do they engage themselves in learning?

### ***5.6.1 Internal Motivators for Learning in Offline and Online Learning Environments***

According to the constructivist perspective of learning, internal processes such as motivation affect learning effectiveness just as much as external ones (Ally 2008: 19). This calls attention

to look at the perceived level of control over learning and its relation to engagement in classrooms:

Learning in universities has different objectives for different personalities, for Sam is about his future career aspirations and “*just [to] have a degree*”, for Fernando and Nikolett learning in university is also related to thinking about the future as they both consider having a degree is important to “*get a nice job*” (Fernando). Laurids’ motivation with learning is more about “*wanting to learn*” and “*having the right incentives*”, while others like Hamish and Bernard were more motivated in learning about new topics that seemed interesting and beneficial for their futures. Lisa’s internal motivation with learning is more about being able to “*decide what [courses] to take*” as well as “*access the learning material whenever I want.*” Lisa appreciated having online learning in universities because she enjoyed controlling her own progress. She claims that if there are “*clear instructions*” on the system and is also “*easy-to-use*”, she is motivated enough to learn on her own.

There is a difference between taking courses voluntarily, learning in universities and getting trained in organizations. In ascending order from the former to the latter there is a shift in regards to perceived level of obligation that imposes impact on the level of motivation for diverse individuals. Alison touches upon the above, “*it depends on the motivation of doing the learning...if it’s something you have to do as part of your job...versus when you want to further your knowledge that’s going to make a big difference.*” So what would be the inner motivational factors in online learning when it happens in an organizational set up where obligation to perform is high but the system provided has low level of supervision?

“*In online learning you have to be self-motivated to do it and if you don’t have someone in an organization to come and tell you what to do or to motivate you to do it then it will become difficult to learn about it*”, starts Hamish when asking him about his motivations with organizational online learning. He also adds an interesting aspect of online learning which – according to him - cannot be handled as a single phenomenon when talking about motivation but also as part of the role of the individual in the organization: “*you also need to be motivated in your job...to use that information in your task.*” Fernando shares a story of his previous work experience where he was on-boarded by getting a book to read. He felt unmotivated and overwhelmed as he worried about applying the information in his position. He explains that especially in telephone-sales where the objective is to learn the information as quick and detailed as possible, “*I learn more by listening than reading, because [by listening] I can act*

*straight away...*” Just like Hamish, Fernando also adds that in order to be motivated in organizational online learning, he needs to feel confident about his knowledge, which makes him motivated in the position itself. Another interesting aspect that covers the quality of learning material in motivations comes from Nikolett. She explains that a good balance of reading, listening and seeing is what makes online learning a good knowledge base. She adds that listening and seeing former or already existing employees to act in the same position she is about to start in, makes her more confident in herself, therefore more engaged in her role and encourages her for further learning.

On one hand, organizational online learning is unique in the sense that even though obligation to perform and control over learning are high, need for interactivity and learning as a social element depend on the context where the actual learning happens. The dynamics between being motivated in the position makes learning motivating, as well as learning becomes more motivating as *seeing* and *hearing* peers performing the knowledge explains that online learning cannot be seen by itself, but by a larger picture where socialization of employees happen.

On the other hand, when learning pace is controlled, interactivity seems to be more likely to be exploited according to previous findings in the analysis. Organizational online learning adds another layer on top of the latter as obligation to perform is also high. Besides providing with the “social” element of learning, both teachers and peers are important in representing “*pressure*” according to Alison and Laurids, however these factors are not necessarily present in case of online learning. When learning with a system it is most of the time up to the individual when to finish a course as it gives more control to the learner in terms of flexibility and borderless access to materials. How can external motivation such as time and peer pressure be replaced in case there are no such things in an online environment? What influence internal motivations to accelerate in online learning environments?

### 5.7. Engaging with Online Learning

Engagement with learning is just as much a matter of individual preferences as the desire to maintain the social presence with others, according to Wenger (2009: 1). Individual preferences vary from individual to individual as we have seen in the previous section and are also dependent on how informants perceive the environment where learning happens. Contextualizing learning environment in this sense is crucial in order to understand how informants perceive online learning to be meaningful with a special focus on organizations:

*“Has to look cool, modern, up-to-date, easy to use (Fernando)”*, *“navigation has to be easy and it has to have a nice interface and it should be focused around getting you learning stuff and not how to use the platform (Serena)”*. According to these answers, engagement with online learning has to do with the system being easy to use and visually appealing. Sam has a similar opinion on the system being a mixture of good content with nice interface, with an emphasis on how it affects knowledge, therefore creates a more engaging learning experience: *“the more potential it has, more quality, more retrospect...listening, talking, make it visually appealing, reading...that mixture stimulates different parts of the brain therefore it will become more effective when using the knowledge in practice.”* Others, like Laurids are engaged with learning online in organizations when it contains features that allow them to interact in or outside of the platform, therefore the system is socially embedded: *“it helps if I am accountable for friends and colleagues and they are accountable for me then you have a bigger incentive to actually learn something (Laurids).”* Hamish approaches the question from a similar perspective, with a focus on the sales position all the interviewees share in common: *“and it also needs be designed in a way that it’s real...it needs to be social...because you are not just absorbing information, you also have to come up with your own [sales] pitch.”* He continues: *“that might socially motivate people to come up with different ways of pitching...some way that it sort of connects with everyone in the office...[it] needs to appear who is online in the platform at the moment, so that it’s saying Sam has done 20 minutes of online learning...that would motivate me as well...you know that you have to get better...because sales is a competition.”*

Shared personal details about one’s life impacted on the sense of belonging in group learning that ultimately affected engagement (Liljeström 2010: 41-42). Hamish’ perspective establishes the importance of the personal connection with peers however Sam – as Hamish’s manager - serves a ground for knowing that a peer who he is either competing with or looking up to motivates him in following whatever makes Sam successful at his job. In that sense, if Hamish perceives Sam being good at what he does and is aware that Sam is doing online learning, Hamish and others will more likely engage with the system.

Competition with peers seems to be a big incentive, that requires an online learning environments that *“socially motivate (Hamish)”* employees to excel. While learning happens online, social motivation is not necessarily based on online interactive features such as discussion boards or *text talk*.

According to interviewees, sharing knowledge in group learning *“is better to carry out face-to-face...otherwise you lose the social aspect (Fernando)”*. Sarah thinks that interactivity is crucial

in learning, however deepening knowledge can only work through face-to-face discussions. According to Alison “*online learning is [...] not a good alternative to face-to-face training*” when it comes to group learning. Fernando adds that discussion boards integrated in online learning are for clarifying information such as, “*hey, what was that about...? I am not sure if I got that right...*”, however it should not replace the face-to-face learning scenarios. This is partly because of the lack of instant feedback that the system provides, and also because of the lack of incentive to involve in discussions: “*the thing with classroom learning is if you don’t come prepared to a class then you’ll be embarrassed and there is a real life impact on whether or not you learn...I think with online learning there is no real life setting like that...there is less of an incentive to go and do it...it has to be some kind of real life consequence of not doing the learning* (Alison).”

Satisfaction with online learning courses has been associated with students’ perceived interaction with peers and teachers, according to a research done on the field by Swan (2002: 42). It seems that reducing social presence online requires a more socially engaging environment offline where individuals with different objectives, such as maintenance of social presence with others or pressure to do the learning can be present at the same time. “*Real life*” learning (Alison) in this sense is not only a matter of creating a higher incentive in forms of pressure, but also helps in the development of tacit knowledge that is ultimately the highest purpose to achieve for one’s success at positions that require to use explicit knowledge instantly and real-time.

Having teachers in organizational online learning has a different meaning than having teachers in classrooms when it comes to engagement as we already observed in the motivation sub-category of the analysis. There is usually one mentor in organizational online learning who is in charge of promoting new courses, updating information and making sure to provide with instant feedback. I was curious about how interviewees thought about the role of a ‘teacher’ in this case and whether this person is impacting higher engagement and if so, how?

According to Sarah it is “*all about trusting that person*”, who puts the information on the system. Bernard expands on Sarah’s input and explains, “*you are always at the mercy of whoever is making the content, driving the policies behind the content so who absorbs it and when, who verifies it and how important it is because it’s going to ultimately determine if people are going to use it...if you make it fun enough, people might use it on their own...but it depends on who sets it up...the person who is controlling the platform has a huge impact.*”

The mentors' role in organizational online learning is often associated with offline relationship with that person, as the perceived level of interactivity between employees and the mentor are mainly based on asynchronous experiences of the informants. The desire of being seen is replaced by the key person setting up the system being promoted as trustworthy by management and perceived to be meaningful by employees who consume the content.

#### 5.8. Establishing Context for Online Learning in Organizations

In the previous sub-category, motivations with using online learning reflected on the system being interactive and providing *real-life* learning experience. According to Jaleel and Verghis (2015) knowledge creating culture is indispensable to establish in the context of online learning (pp. 8-12) which calls for a deeper understanding of how corporate culture as the context of online learning promotes learning being important. Engagement with using online learning in organizations seems to require a broader perspective on where the learning actually happens. What factors influence interviewees' engagement with online learning in organizations and what contextual aspects contribute to a successful implementation of a system in the corporate culture?

In Lisa's opinion it is important "*being good at communicating why online learning is good for you is key in organizations.*" She continues that management is responsible for making employees understand that "*this course is going to improve your performance.*" Bernard shares Lisa's perspective as he also sees his engagement dependent on how management handles the question of employee development and how they promote the system being important. According to Sam, in order to make a successful implementation of an online learning system in organizations that employees engage with, the key is to "*continue, it cannot be just a one-time method.*" "*The corporate culture has to strive employees to excel...that would have a much bigger impact [on the successful implementation of an online learning system in an already settled corporate culture]*", says Alison. Hamish continues with the importance of the corporate culture in employee engagement with the system. According to him, the organization has to relate to a learning culture where the technology being used is integrated with the online learning system as well. He brings an idea on how this could work: "*if you are always using a CRM [Customer Relationship Management] system then [online learning] needs to be part of it, and learning has to be part of the day, easy to access, easy to come up with new content...in the CRM system that shows how many calls you have made and can show you how many minutes you have spent on the phone...perhaps there is a need to come up with a system that*

*integrates with online learning...things saying this is what you need to achieve to get to this target.”*

In terms of engaging with online learning in organizations, there are many aspects that need to be settled before and after implementation. Some interviewees engage with the system being visually appealing and easy-to-use, which - among other factors - influence the knowledge being successfully retained (Sam). Other answers reflected on the system being socially embedded in the organization, as the more peers are using it, the more it becomes a drive for others to use, especially in case of such competitive position as sales (Hamish). Even if there were some opposite opinions on the importance of a mentor in the system or having discussion boards, they all agreed on the context where the implementation happens affecting engagement with the method. This context – also called the corporate culture - either had to provide with a trusted person who is associated with updating the content on the system (Sarah), management promoting the system being beneficial for employees in terms of their development (Bernard), or provide with materials that can be used outside of the work context (Lisa).

## **6. Conclusions**

### **6.1. Interactivity as Perceived Online and Offline – Answers to Research Question I.**

As previously discussed, in the literature of the online learning field comparative methodology between classroom and online learning has been applied in order to prove the latter needs features of interactive elements, which is the core advantage of the former. Classroom learning therefore is somewhat explained by being interactive or at least has more space to make its environment interactive. According to the interviewees this is not the case. It is naïve to think that if an interaction happens in a real-time environment that makes the experience interactive. So what is interactivity then? Interactivity can be interpreted in different ways: it can happen between two or more people in forms of dialogue, but it can also happen through a medium or system. The latter occurs when the system requires the user to give an input and responds back with some sort of output. The dynamic nature of input-output is what makes a machine and a human relationship interactive. Even though answers surrounded by the perceived level of interactivity with motivations and engagement with offline and online learning differed from one another, interactivity being perceived high or low did not point to either one or the other direction. In terms of interactivity, both learning environments had positive and negative sides.

Summing up the answers from the interviews, university online learning seems to be less engaging because only material is shared from the class and even though it includes discussion

boards, students are not using it. They do perceive learning online in universities to be helpful because it is repeatable and can be used anywhere but if there is a chance to maintain interactivity outside of the platform then these features are not for social engagement but for clarification of misunderstandings that is due to the lack of information from the system. This way of thinking implies to interviewees' attitudes on engagement with online learning in organizations regarding the importance of implementing discussion boards that are responsible for a higher level of interactivity. When there is a chance to interact face-to-face, interactivity remains important within the content but not with peers or facilitators. The context in which online learning happens is responsible for engagement, as one peer can engage the other with promoting the learning being important for personal development and growth. This, in Jenkins sense, is a similar dynamic that works in participatory media, however in case of learning, interactivity still needs to be offline apart from allowing access to it in online environments. Interactivity is motivating, but engagement is still a matter of how we evaluate our offline relationships with others, and engage in activities when other peers show engagement.

## 6.2. External and Internal (Engagement) Motivations Offline and Online – Answering to Research Questions II. & III.

According to the answers of the employees, motivations with classroom learning were most of the time long term, which means that they saw their education as the first step to get a good job and have good references. This has to do with the perceived importance of prestige that universities offer and it is a large part of interviewees' external motivators of university learning. Those who mentioned more practical assignments where they were working with a small amount of peers, they usually had good experience, if three aspects were in place: interesting topic, charismatic teacher, like-minded peers. In case of the topic, the interest and relevancy were the key terms, in case of the teacher, it was more the enthusiasm, passion and professionalism, meanwhile peers needed to have the same level of engagement and mindset towards the topic they were working on. Motivations with online learning were more about the design of the learning material and trust towards the person who builds it. According to the interviews, there is a question that rises up in terms of motivations with online learning: in which ways interactivity becomes more important when the learning is being perceived as voluntary or an obligation? When learning seems an obligation, for some people it becomes more motivating - such as the time pressure indication brought up by Alison - however for the majority is demotivating. Either ways, perceived level of obligation in learning with less control over learning pace in asynchronous learning environments had bigger incentive with external motivators, and informants were more motivated with teachers and peers than in cases where

they controlled their own learning paces. Classroom learning has been perceived with less space for interactivity and more engagement with external motivators such as teacher and peers. Online learning on the other hand has been perceived asynchronous but more freedom in terms of controlling learning paces and less need for external motivators such as peers or teachers. Learning pace and the control over it was strongly associated with the voluntary nature of learning and even though organizational online learning is generally just as much an obligation as university learning, according to the answers, online learning seems to promote a more voluntary learning environment which seems to require more of internal motivators and less external ones.

The importance of teachers' presence in organizational online learning was perceived differently from university. In university the teacher is expected to provide with external motivation in form of "*time pressure* (Alison)" while in online learning (both organizational and other environments) teachers are facilitators who need to be trusted and provide with instant feedback that continuously reassure students they are on the right path. In terms of the importance of interactivity with peers, help coming from people that made them more motivated in learning were mostly about topics they found difficult and stressful (Laurids, Sarah, Fernando), while in case of discussion boards in the systems, interviewees were more likely to suggest implementing group learning scenarios besides using boards for the basic clarification of misunderstandings eroding from the learning materials.

In this sense, gaining practical knowledge, as well as transforming explicit knowledge into tacit is just as much a matter of internal motivator as acquiring the knowledge as part of a group. In case of online learning this still includes a desire towards a more socialized knowledge, where individuals felt more confident and motivated in the application of knowledge at their role when they listened and saw their peers acting real-time. When feeling obligated to learn the material, it required a higher level of social element in learning in comparison with when the individuals learn voluntarily for their sake of development, both in case of classroom and online learning. High level of interactivity coming from teachers and peers generally become a motivator when it helps them in personal development and growth, meaning helps to put explicit knowledge into tacit. These external motivators are even higher when feeling insecure about the learning material. Interactivity in case of online learning is likely to be perceived low, however motivation is not necessarily the presence of others in the system, but instead seeing/hearing peers act in a work situation where the actual knowledge becomes performed. The desire towards socialization in this sense is not necessarily acquiring knowledge as part of a group

thinking mechanism but rather as an individual mechanism that has an aim to “see” the knowledge becoming performed by a peer and believing - and becoming confident about - that the individual is able to perform that knowledge in his/her work, which contributes to a higher level of internal motivation, when external ones are being perceived low.

### 6.3. A Challenging Way to Go for Organizational Online Learning – Answering to Research Question IV.

This dissertation has been written initially for the sake of a more effective online learning in business environments where according to my experience learning methods have been exploiting online strategies mainly in order to reduce time and cut back costs. Reaching high efficiency in business results lie in the pure fact that employees need to be trained and developed, as throughout as possible however individual characteristics impose challenges in how people would like to learn. The aim to reach a better learning in organizations would be impossible without academical underpinnings that serve with understanding how online learning has been studied in recent years and provide with measurable results on the importance of implementing interactive features into online learning environments. Theoretical frameworks of participatory media support the broader context of online activity as such in which concepts of control over contribution and the importance of sharing this with others explain current perspectives of how engagement with media occurs, and can/should be applied when articulating the *how* of learning for the net generation.

The successful implementation of an online learning system into an organization is the most crucial step in engaging employees. For the majority of the interviewees, internal motivations with learning were associated with being able to develop themselves. This explains that promoting online learning, as a great tool for their sake of growth is a way to increase the system’s usability. The context in which learning happens is strongly associated with who promotes the message of online learning being effective and whether that person is seen to be trustworthy. In our case, organizational online learning has been perceived less obligatory, as online learning has been associated with taking courses on Duolingo or Coursera that are “voluntary” applications in nature.

### 6.4. Calling for More How-Questions

Further research is needed to find out whether the actual obligatory nature of online learning in organizations would increase the need for interactive elements such as increased need for teachers’ presence and peer help, as we have seen previously when learning has been perceived asynchronous and difficult. This could be carried out by action research where competent

trainers would be able to experience changes in action of perceiving interactivity more or less needed in a business environment and continuously assess behavioral changes of employees.

Another aspect of the interviews reflects on the necessity for studying national diversity among respondents, as cultural differences affect experiences, motivations and engagement in both learning environments. These social and cultural details would enrich our understanding of individuals assessing learning obligatory or voluntary, synchronous or asynchronous and provide with more culturally specific information about the need for interactivity for each scenario.

Online learning today has many great objectives in providing with lectures for children in developing countries. *E-learningforkids.org* is one of the most well known non-profit associations that welcome the best online learning instructors around the world to voluntarily contribute with effective and engaging online lectures for children. It is urgent to understand online learning from as many angles as possible, as a growing number of children is getting access to online lectures, without having opportunity to learn in social environments. The purpose of sending materials across borders for those who would not be able to study in schools is a heartwarming attempt to reduce educational divide between developed and developing countries, but it does mean to dedicate time making sure children are taught by the best possible approaches in online learning that develops their knowledge and makes them just as successful as their peers who have opportunity to learn in schools.

We participate in the media because we are engaged. Can we say the same happens with learning online? Generalization is not what we were striving for in the context of the research, but to contribute to quantitative research with perceptions, attitudes and thoughts on the field grounded in participatory media perspectives. Many questions remained unanswered; I am therefore inviting reflections and contributions from online learning enthusiast who genuinely care about making online learning the most effective and engaging educational strategy not only in organizations.

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## Appendix 1. Semi-Structured Interview Questions

### Introduction

- Where did you go to school?
- What type of degree do you have?

### Classroom-learning related questions

- Could you please describe your experience with learning in schools?
- Could you please give me examples of what makes you motivated in learning?
- Could you please tell me about how important it is for you the teachers' presence in classrooms?
- Could you please describe peer help (group learning) in your motivation with learning in schools?
- Could you please describe a typical case when a teacher's presence motivated you/made you more engaged in your learning experience?
- Could you please describe a typical case when classmate help made you more motivated/engaged with learning?

### Experiences with control over learning

- What do you think about individual learning and collaborative learning? Which do you think is more effective in the acquisition of knowledge?

### Online learning related questions

- Could you please tell me your experiences with online learning?
- What do you think about the importance of peer help and teachers' presence in an online learning environment, when it comes to applying the acquired knowledge at your work? (Confidence in applying knowledge at their role when they have peer-, teacher help real-time versus when they learn individually)
- How do you feel about teacher and peer help via email and/or face-to-face interaction in an online learning environment when you are applying the acquired knowledge into your job? (Finding out how text-talk - indirect interaction - and face-to-face - direct interaction - influence confidence levels when it comes to turning explicit knowledge into tacit)

- How do you find the following elements helpful to your learning experience online: audio-recording, video-based content, animation, gamification? (The importance of interactive content in engaging with online learning)
- What are those elements of online learning course that you find the most engaging and why? (Broader question about whether learning in a social environment is part of what people think is the most important in engaging with the online learning artifact?)
- Do you think that interactivity is suitable/important in an online learning environment? Why or why not? (A more direct question about how participants would like to learn online)
- What are the strengths and weaknesses of having interactive elements in online learning platforms? (Requires a more critical thinking of the participants, where they are able to evaluate pros and cons according to their experience with learning in schools and in online environments.)

Organizational online learning related questions that relate to contextual factors within the online learning artifact

- Does the organizational culture have to do anything with a successful implementation of an online learning system? If so, in which ways?
- How does an online learning solution need to be implemented and practiced in an organizational environment in order to make you engaged with it?

Additional questions

- Would you like to add anything to the previously discussed topics?
- Do you have any questions related to the research?

## Appendix 2. Categorization of Answers from the Interviews

Categories/Names	Fernando	Nikolett	Lisa
Experiences with classroom learning (teacher's presence, peer help)	Boring, very theoretical, he only enjoyed practical assignments: "I think people can only learn stuff when being in a real situation", "it depends on the teacher but it's very important to have teachers in schools", he likes getting external help when studying and he also got used to it as they had to do lot of learning in teams in the university.	Very theoretical and one-sided, according to her classroom learning becomes boring and un motivating when other students ask questions, that she already knows. Peer help, as opposed to teacher's presence is important when clarifying information in a more personal level, which is a need for a more "people who think alike, understand each other better" type of thinking.	Terrible experience with learning in schools, disconnected with interactivity when it's used for answering questions for peers, that the individual already knows.
Experiences with online learning (teacher's presence, peer help)	In asynchronous online university environment: "it was a waste of time", "I wasn't engaged with other people in that scenario...", In case of Coursera: "it was relaxing to use that system...because I didn't have that much obligation", he became disappointed when waiting for the feedback from the teacher that wasn't synchronic, after this experience he found it harder to engage with the learning since he felt alone and wasn't able to exchange ideas with others which – according to his experience – "maybe (the online university) wasn't for me". Regarding peer help, he had the opportunity to "ask right away from people that have the same interest as you"	Online learning experience is duolingo (Dutch language), very interactive system, it feels like she is achieving something when only doing 5 min/day, positive reaffirmation techniques are used in the system as well according to her. The other experience is iTeach Clerk and she thinks that it's important to have a system to always go back to when forgetting something in such an uncertain environment, the system brings certainty in a culture where information changes day by day and builds trust with it, as the information is up-to-date, especially for part time employees who might forget about product knowledge/sales techniques.	Organizational online learning experience with iTeach Clerk and she liked it because it "made me successful in my work", if she didn't know something, would look it up, read it and use it at work. UN experience with online learning: material given in small steps, could access it anytime, anywhere, at the end of each assignment a sum of text that scored if the individual understood the main points of each assignment and there were also tests to test the individual herself, before the actual exam (vocabulary, and processes of project management): "I loved it...just me and the problem."
Motivations with classroom learning (peer help, teacher's presence)	"Getting a nice job", "I am motivated to progress on my own when I feel passionate about the topic." When the topic didn't seem interesting but rather hard, motivation from others helped him better understand therefore more successfully acquire the knowledge gained in practice.	She's learnt for having a good education and a good job after, peer help is important for a more practical acquisition of knowledge that helps individuals "translating hard-to-understand theories in a more understandable and clear way."	Motivation with learning happens when being able to "decide what (course) to take", being able to "access the learning material whenever I want", the importance of teacher's presence in motivation depends on the size of the class but the individual doesn't see the presence of a teacher an important asset to her motivation. The importance of peer help in motivation for learning is only for the sake of competition, it can "enrich each others' experiences but not that much because everyone has his/her own perspective."
Motivations with online learning (peer help, teacher's presence)	"I learn more by listening than reading, because (by listening) I can act straight away...". Importance of the mentor is alright but inside of an organization it doesn't make much sense, if the material is provided in the right way and if there is an opportunity to interact with people who are already there, then it's not necessary. Not having much opportunity to interact on the system, he says "I found it harder to learn, because I didn't have the motivation...and couldn't engage with people"	Online learning is a recap and good to have something online, something to reach out for. Listening and seeing (previous phone calls) are very important in the application of knowledge for her motivations.	It's good to have peer interactivity built-in the system, especially for those who are looking to get tested at the same time so can practice together IF there are some clarification issues. "There is no point in having teacher's presence in organizational online learning, if the online learning environment is set up appropriately, meaning it gives clear instructions and is easy to use."

Categories/Names	Fernando	Nikolett	Lisa
Engagement with classroom learning (peer help, teacher's presence)	He could engage when having more practical assignments where he could get help from others, "if they know what they are talking about and are passionate", "...and then I started reading more...from that moment", "even if I don't want to do it, I have to because they are relying on me"	She is more engaged when learning about practical things. Motivation and engagement with learning is not about the physical presence of the teacher but rather knowing that the teacher is a valuable asset to personal growth and this is the ultimate desirability for engagement to happen.	When a teacher presence made her engaged in learning happened when the teacher talked about his personal experiences of the topic under studied. (relevant experience)
Engagement with online learning (peer help, teacher's presence)	"Has to look cool, modern, up-to-date, easy to use", important to learn online about the company but need some face-to-face training as well because "otherwise you loose the social aspect", "sharing knowledge is better to carry out face-to-face...it can be an extra feature to implement in organizational online learning, but shouldn't be the only way of sharing knowledge, especially in case of a small organization", live chat is important if the individual has "doubts" and has the opportunity to "ask right away from people that have the same interest as you", using live chat boards in online systems were for clarifying information that the individual didn't understand: "hey, what was that about...?I am not sure if I got that right..."	The emphasis is on "appropriate answer" that gives the individual a more engaging learning experience, synchrony is important when giving real-time feedbacks as soon as possible, that face-to-face trainings have (even a small reaction can be feedback)	In order to successfully implement an online learning platform in organizations, management has to make people understand that "this course is going to improve your performance", and also make it mandatory but the system and management both have to stimulate you to take the courses, -"being good at communicating WHY online learning is good for you is key in organizations" The course that UN gave the individual wasn't only beneficial for the position at UN, she can also use that knowledge at her other jobs, in the future.
Conclusion	Interactivity only becomes important for the individual when it helps him/her in personal development and growth, meaning helps to put explicit knowledge into tacit. Interactivity in this case is not necessarily the presence of others, but seeing/hearing them act in a work situation where the actual knowledge becomes performed. Socialization in this sense is not acquiring knowledge as part of a group thinking mechanism but rather as an individual mechanism that has an aim to "see" the knowledge becoming performed by a peer and believing (becoming confident about) that the individual is able (could) perform that knowledge in his/her work.		
Notes	Belonging to an online community isn't that important, because the individual feels that he doesn't have time for it, therefore having the control of learning becomes more important when studying topics of interest	The level of interactivity is too much for today's individuals, as they feel like they don't have time and patience to listen to peers' questions, they rather control their own learning progress and wish to maintain a low level of interactivity that is only needed when seeking for help and clarification -organizational online learning: the more interactive the better, the less reading the better!	

Categories/Names	Sam	Sarah	Serena
Experiences with classroom learning (teacher's presence, peer help)	"My classroom learning experience is not so creative", "this is what we learn, learn that...done!"	"Professor explaining with slides or other material support some topic and the class was listening to the professor while he/she was speaking." The teacher would sometimes create a small group-discussion at the end of the class, however: "my experience was one way...not that much of interactivity."	"Classes with 800 people in university, not a lot of space for interactivity": "not so interactive but rather academical."
Experiences with online learning (teacher's presence, peer help)	Online learning experience in different organizations and he has a good experience, everything was clarified, read information then answer the questions and there was feedback given based on his answers being correct or incorrect: "you've learnt, you were tested, then you got feedback...it was a cycle."	Organizational online learning experience is good, the questions were challenging in the sense of the individual really understood what it was written or heard by someone who she could interact to should also be part of the learning in order to "deepen the knowledge."	Experiences with online learning include university online learning where the big classes were recorded and it was helpful for the individual because she could repeat the class and could use the material anywhere. Organizational online learning experience was with iTeach Clerk and she thinks it was helpful because "having the most relevant content ready for yourself to look at is easier than asking old employees about the products who might be tired of answering to questions of newcomers."
Motivations with classroom learning (peer help, teacher's presence)	Motivations with learning is thinking about future career aspirations, knowing he wanted work in some kind of business. Learn more about the processes, and to "just have a degree." Teacher in motivating is good when he/she puts a different light on the assignment and encourages the individual to look it in a "different way" Group learning in motivation when doing an assignment about a company, it was hard in the beginning since an information about the marketing strategy was missing, when one of the students discovered something about the topic from the company, it started "making sense" and became interesting "Group learning helps you get more information that you wouldn't get by yourself, sources it in different way therefore it becomes motivating as all of a sudden you'll have more knowledge."	Experience with teacher in motivation with learning, the teacher was well known on the field, the individual was very into the topic, "he's way of teaching was to try and challenge us...it was an interactive way to carry on the lecture" The teacher always gave space for open discussion, asked the students about their opinion and perspective on each topic, summarized the points and gave his perspective on the topic as well. Group learning doesn't help the individual, she is more like an individual learner, "I learn to pass the exam as well", "I need to optimize my time and optimization is a solitary work" Group learning can help in the sense when individual is explaining a topic to a different person, "when sharing...it helps in learning...but it's a very slow process." She still remembers finance topic when she was explaining it to a classmate.	Peer help is motivating if group is good in the subject that is being under discussion and helps in explaining something that is not clear. "Sometimes it's also helpful in formulating the questions, but you find your answer yourself to it" "just to have somebody to talk to about it." Teacher presence is motivating if he/she sells the subject as "the most interesting thing in the world" and is also passionate about it, even if individual wouldn't necessarily be interested in the subject itself. Motivated in group learning when it's practical (and most of the time group learning scenarios are oriented towards solving a practical case), also because "you want to impress your classmates"
Motivations with online learning (peer help, teacher's presence)	In order to make a successful implementation of an online learning system in organizations the key is to "continue, it cannot be just a one-time method" It's important to re-test in order to see whether the knowledge has been successfully attained by the individual. text and also visual design is important in assignments and questions as well that "stimulate you going" The individual would like to have a "read, question, read, question" type of on-going learning experience, because the point is to "take-in the knowledge" The "feedback needs to be given instantly after the test" His answer for how important interactivity is in organizational online learning: "what's the point of doing something if you don't know if you are doing it right or wrong."	University online learning is more like uploading content from the teacher to the students with discussion boards but she didn't use it - "I prefer to have a dialogue with the teacher or with other students directly." With e-learning people can concentrate on the technology that is not so easy to understand but "if you have further questions you actually need a person there." Discussion board is beneficial (support that employees "can trust") if it's 24/7 and only if the answer to her question comes right away, otherwise "I would still prefer the personal contact...personal contact is important in the sense of feedback from body language."	In organizational online learning, "before I had the role-play, I had to watch a video and answer small questions and by typing the answers, I could actually remember and at the end of the day, that's the point", "teachers' presence in online learning would become more like an external motivation, in a form of pressure" but "it depends what is the role of the mentor, is it just to help you or to give feedback and grade you?" Discussion board will only be used when having a specific question and to clarify a misunderstanding and it also depends on how many people can see the board and whether the teacher can see the board because "you maybe don't want to admit if you don't know something and to let everyone know...it's like asking a question in front of the class."

Categories/Names	Sam	Sarah	Serena
<b>Engagement with classroom learning (peer help, teacher's presence)</b>	<p>In order to engage with learning it needs to be challenging, and to enjoy the content, it's important to enjoy what he is doing, the content needs to be relevant, needs to be about what you learn (ultimately what you enjoy learning), it's also good when there is an opportunity and freedom to study a company that the individual has chosen.</p> <p>Teachers' presence in classroom learning is needed in order to structure and guideline, the teacher is someone who "informs you when you do something right...or wrong...to guide you through the process of learning."</p> <p>Peer help is beneficial for the individual's higher level of engagement with learning happens when wanting to get more knowledge in the topic, peer help can "further or change or better your opinion."</p>	<p>Engagement with learning is all about curiosity, "my overall knowledge is pretty disperse" – "I am not a specialist, I am a generalist" – much more interested in learning a bit about everything.</p> <p>Engagement with learning depends on who the teacher is and what the topic is but if the teacher is enthusiastic, he/she can keep up the motivation of the individual.</p> <p>When it comes to learning in class it's definitely the teacher who influences the engagement of the individual: "teachers are beneficial because they are human...they can interact with you...if you have any questions or issues you can just raise your hand and speak up."</p>	<p>"It's definitely more engaging because the actual value of having a professor and not studying from books, there is the rather interaction and I need to be actively involved into something because I get bored when I am just passively involved", smaller classes and working on practical things helps her engaging with learning more.</p> <p>"I am absolutely a person who likes to learn in groups, because I love the interaction and I like answering questions or having short problems that need to be solved, this is when I am more motivated, not when I learn from a book"</p> <p>She is engaged with learning when she is less engaged when she is forced to "start memorizing and not learning".</p>
<b>Engagement with online learning (peer help, teacher's presence)</b>	<p>To make a successful implementation of an online learning system in organizations the key is to "continue, it cannot be just a one-time method." It's important to re-test in order to see whether the knowledge has been successfully attained by the individual, text and also visual design is important in assignments and questions as well that "stimulate you going." Employee-interactivity in an organizational online learning environment – the more input is given from different employees, "the more potential it has, more quality, more retrospect", "listening, talking, make it visually appealing, reading...that mixture stimulates different parts of the brain therefore it will become more effective when using the knowledge in practice."</p>	<p>Online learning is handled by one/two person(s) who put(s) all the information on the system, and is "all about trusting that person" if the information is up-to-date and there is also a need to trust the system if it's working.</p> <p>Interactivity is important (face-to-face also), text is needed (to understand the issue first) then go through it with people in form of dialogue (chats, forums) in order to deepen the knowledge with someone who is willing/able to discuss with.</p> <p>Discussion board would be important not only to ask questions but also being asked.</p>	<p>In terms of how the individual would like to learn online is the "mixture of good content, possibilities to exchange, get feedback and maybe some gamification...something that is also fun to learn" The most engaging feature of an online learning platform is the audiovisual content that is easy to learn from but "in terms of getting myself being active then is the small assignments that I have to do"</p> <p>Engagement with online learning in an organization is getting "instant feedback...to keep myself going and to have short term satisfaction feelings", "navigation has to be easy and it has to have a nice interface and it should be focused around getting you learning stuff and not how to use the platform."</p>
<b>Conclusion</b>			
<b>Notes</b>			

Categories/Names	Laurids	Hamish	Alison	Bernard
<b>Experiences with classroom learning (teacher's presence, peer help)</b>	He chose according to the field of work he was interested in and "it really helped my learning process because I just had the incentives to learn and I think it's really important", "if you don't have the right incentives, you'll never be receptive towards teachers and towards learning", in this sense "incentives were the key for me to excel in university."	Classroom learning focused around "going to lectures and also doing the readings", with some tutorials that focused on particular areas.	"Depends on the teacher but sometimes my experiences were more successful than the other times." Teachers would ask broad questions and no one really knowing what to answer to them and it created some type of pressure and awkward situation, "whereas teachers who were more willing to create more specific questions to specific people...then you knew something was expected."	Didn't like classroom learning because people in the class learn with different pace: "if you stuck into that environment repeatedly it gets really boring."
<b>Experiences with online learning (teacher's presence, peer help)</b>	iTeach Clerk was a "knowledge-share throughout the company." His experience with organizational online learning wasn't interactive "so far it's been one way."	Experiences with online learning in university, completing some assignments online and getting grade from it. Organizational online learning includes British Government was the first online learning experience that also involved not only trade, but also social services like finance and common things like security. ITeach Clerk experience is good to have a knowledge base where the information lies.	Online learning experience includes leaving everything for the last minute and not feeling good about it since there are no pieces that she had to turn in before, there wasn't a continuous learning therefore it became demotivating and stressful. Organizational online learning experience is with iTeach Clerk, the experience is good, since the information is accessible anytime, anywhere.	Organizational online learning experience include many companies that he worked for, systems that work as a knowledge base for the company to store information in one integrated system (like Grand Central), not a good experience, waste of time and money.
<b>Motivations with classroom learning (peer help, teacher's presence)</b>	Motivations with learning is wanting to learn and having the right ambition and reason for being there, group learning scenario that made him more motivated happened when the topic was English grammar that they all disliked very much: "we knew we had to use each other to get the most out of this and actually being able to graduate...it was a really good incentive to drive yourself forward as a part of group and make sure that everyone in the group passed" Teacher presence in making learning more engaging was Danish language and literature because "my teacher back then was really charismatic and he knew everything but he was also one of the first teachers in my life who looked at you as a peer or as an intellectual being...and that was eye-opener for me...I respected him so much for it" "He motivated me only by getting into a dialogue with me and showing me that he respected what I had to say", "I had the best	"Finding out new things...and how those benefit your life", in marketing lectures the personal connection with the teacher was very strong because of his professionalism and expertise on the field, an example in Danish class where he doesn't enjoy working with the group because they are slow and also have a different style in learning, they are much more detail oriented that slows down the learning experience therefore effects the motivation of the individual in a negative way, especially if the group has one person who thinks that can lead the others and influence others learning experiences.	Motivations with learning includes working in groups, that helped her a lot, example is when she and another girl were working together on a project and were on the same level and they were also good friends, "we have started working on the project way earlier than I would have done by myself...and that's one of the best things in it...we were able to go in details...and we could also contribute positively to each other", teacher's presence in motivation with learning, the teacher "is bouncing the steps off and making you work along the way and giving you deadlines along the way."	Motivations with learning include the subject itself, understanding certain things or having a broad view on things, some teachers can also make him motivated in learning, teacher presence in the motivation with learning when the teacher realized that he was class clown but still saw the potential in him, understanding that he knows more about topics than he actually should, "he recognized that I knew about chemistry...and started challenging me on that and pushing me individually which meant that even he was teaching a classroom of people, he was pushing me on my own...so like teasing me or pointing out that I wasn't as smart as I thought I was", "if he gave assignments to us, he would always change it a little for me...and this made me feel a little bit special...and I ended up getting really high scores in this class" Peer help in motivation with learning goes back to high school in wood class, "learning with all those people who are qualified...so when you are learning how to use some tool, they all had

Categories/Names	Laurids	Hamish	Alsion	Bernard
	<p>experience both in terms of working and studying when I've been learning together with others...making sense of some of the tougher topics together with others for me it's just much easier way of acquiring knowledge."</p>			<p>knowledge on how to use those tools...so you didn't have to wait for people to learn things that you already knew", so "it was fun bouncing off ideas off each other"</p>
<p><b>Motivations with online learning (peer help, teacher's presence)</b></p>	<p>"Based on my other experience with learning in the past, I would imagine that interactivity would be a very big help, especially when talking about online learning where you are sitting in front of the computer and not in front of a person...because you don't have this direct line to another person" Interactivity would help in the motivation of the learning of the individual the same way as group learning has an obligation to perform for the others, and a higher degree of professionalism from the side of the company is also a must to keep up the motivation.</p>	<p>"Some of it was hard, because you couldn't rely to what you are actually doing in your role because it was a common ground whereas it didn't specify what I need to do in my job" "In online learning you have to be self-motivated to do it and if you don't have someone in an organization to come and tell you what to do or to motivate you to do it then it will become difficult to learn about it." In order to be motivated in organizational online learning, "you also need to be motivated in your job...to use that information in your task."</p>	<p>It needs to be "complex enough to really test your knowledge." To make her engaged with online learning the platform should look like "real life", to know that there would be consequences of some kind, a checkup or your test results being posted publically, "so there is some kind of incentive that you should do your learning." In terms of having interactive features of an organizational online learning setting "it depends on the motivation of doing the learning", "if it's something you have to do as part of your job...versus where you when you want to further your knowledge that's going to make a big difference", "if you are just told to do because you have to and you are not engaging with it then you are not going to make that much use of a mentor but if you are doing it actively because you want to learn that material, then it's good to have somebody there to help you, ask questions about the material...but it also depends on how difficult the topic is and if it requires some further explanation, help or guidance."</p>	<p>Salesforce has online learning functionality and also has chat and messaging functionality between peers but he doesn't think that it's very efficient to communicate through those systems because "there are already many ways people communicate with each other, like email...and to add another layer to direct communicate between colleagues as a soul way to communicate...it would be more likely to communicate externally about the training, such as email or just speaking", His previous workplace at Secunia, they set up Grand Central only because everyone else had that but didn't make the system usable and never took good care of the system neither promoted to people so "it was a huge waste of time and money...nobody used it...they failed to provide with a good system."</p>

Categories/Names	Laurids	Hamish	Alsion	Bernard
Engagement with classroom learning (peer help, teacher's presence)	<p>"I am engaged with learning when I am interested in something and when I also know that I am good at it...something I can see that takes me somewhere and I can work with"</p> <p>"I was struggling with math, science and biology because it didn't interest me at all, whereas English and culture just resonated really well with me and I was also good at it", "A good teacher can make a huge difference...in fact...all the difference, in my opinion", as well as, "interactivity leads to a better learning environment"... "in case of individual learning there is a limit of how far you can get, in my experience, because you are just sitting there alone with your thoughts and not having anyone to spare with."</p>	<p>"Teachers presence is quite important because you also learn from the style of teaching but it needs to be a person who you can rely on to..." "If they don't interact with the student and don't stay relevant to the topic they are not good", "if you have peers you can rely on and have a same ground then it definitely helps in my motivation with learning, sometimes if it's a person I don't get along with and I am not interested in the topic I don't find that learning experience neither helpful nor engaging."</p>	<p>"If something seemed really challenging then I would just scare off, and I wouldn't really engage with it, because it seemed too much, whereas the same project with the same difficulty level and I was working on it with somebody, then the two of us could look at small parts and bounce the ideas off each other and figure each step out...these times you always get feedback...these are the things that motivated me the most...and the things I felt more successful in during university." It's not motivating to learn in group if the people are not at the same level as you, if they are on a high level in the topic then "they would be engaging at a level where you are not at.", "When I was learning online and didn't have the teacher I kind of felt like I could stop anytime...take a break for a couple of weeks", therefore "it's always good to have someone there, to guide you in the right direction or to just give you deadlines..."</p>	<p>"It depends on the teachers ability to that student individually and challenge them appropriately which is very difficult when you have 30-40 people in the class", among those people one person learn for the first time and the others that need to repeat the same topic for 10 times: "how do you keep the motivation of those who would have learnt it for the first time?" Peer help in his engagement with learning includes "only likeminded individuals who learn at the same pace"</p>
Engagement with online learning (peer help, teacher's presence)	<p>He would be engaged with learning online in organizations if it was structured in a way that it needs to happen in groups: "it helps if I am accountable for friends and colleagues and they are accountable for me then you have a bigger incentive to actually learn something."</p>	<p>On a successful online learning platform should appear the fundamentals about the product, what the company is and its values and also needs to be examples of how others sell it..."and it also needs be designed in a way that it's real"</p> <p>Maybe writing their own pitch or just put it in scenarios..."because it needs to be social...there is one learning element...because you are not just absorbing information, you also have to come up with your own pitch" How to create the social element on the system: with some sort of role play, record it and/or play it to colleagues to peer review it, "that might socially motivate people to come up with different ways of pitching...some way that it sort of connects with everyone in the office" also "needs to appear that who is online in the platform at the moment, so that it's saying Sam has done 20 minutes of online learning...that would motivate me as well...you know that you have to get better"... "because sales is a competition...in</p>	<p>"The corporate culture has to strive employees to excel...that would have a much bigger impact (on the successful implementation of an online learning system in an already settled corporate culture)", "online learning is not seen as a good alternative to real life training and I haven't been challenged with it so far...but there is no reason not to make it effective" It will become the most used form of training in the future according to her because it's so much cheaper in a world where labor gets more expensive. There should still be some group interactions in online learning either integrated within the system or outside.</p>	<p>He would like different types of content like documents, videos, pictures, interactive games and also usability. The culture has a lot to do with the successful implementation of a system, "the biggest thing of course is management, which tool they pick, who they choose to take care of the system."</p>

Categories/Names	Laurids	Hamish	Alsion	Bernard
		<p>terms of what you are putting out for your customer or the company so it needs to be socially kind of created as well around targets”, “a message that pops up during the day saying, I know you haven’t gotten any deals in yet, how about we focus on this for 20 minutes so it kind of excuses you to being on the sales floor and you can just focus on your pitch, then come back and use that as an element of your work...whether it’s something you need brush up on”</p>		
<p><b>Conclusion</b></p>				
<p><b>Notes</b></p>		<p>If the learning culture relates to the organization and to the culture as well, the technology that you work with...so if it’s an online company, there needs to be online learning, and the system should be integrated on its own platforms”          -“if you are always using a CRM system then it needs to be part of it, and learning has to be part of the day, easy to access, easy to come up with new content”          -“in the CRM system that shows how many calls you have made and can show you how many minutes you have spent on the phone...perhaps there is a need to come up with a system that integrates with online learning things saying this is what you need to achieve to get to this target”</p>	<p>“The thing with classroom learning is if you don’t come prepared to a class then you’ll be embarrassed and there is a real life impact on whether you or not you learn...I think with online learning there is no real life setting like that...there is less of an incentive to go and do it...it has to be some kind of real life consequence of not doing the learning”</p>	<p>“You are always at the mercy of whoever is making the content, driving the policies behind the content so who absorbs it and when, who verifies it and how important it is because it’s going to ultimately determine if people are going to use it”, “if you make it fun enough, people might use it on their own...but it depends on who sets it up...the person who is controlling the platform has a huge impact”</p>