## Human Centred Design in creating Online Learning

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### Introduction

The global pandemic hit everyone in teaching and training completely unexpectedly and led to the initial adoption of "survival strategies" in the delivery of online teaching. Now that we have been confronted with the situation for some time and online learning is becoming an increasingly relevant issue, it is time to move away from the survival mode. Effective online learning is much more than uploading slide decks and lectures that were meant to be presented in person. Teachers of every type have always been more than content deliverers, classrooms should be more than content delivery containers. Providing effective online courses means focussing on the needs of your learners. This article gives a short overview on the main principles using the human centred approach in developing online learning and how learners and teachers can benefit from it.

### What do we mean, when we talk about Human Centred Design?

In a nutshell, human-centred design (HCD) is an approach to problem solving, commonly used in design and management frameworks that develops solutions to problems by involving the human perspective in all steps of the problem-solving process.

Human design-centred projects follow principles and processes that start with people and their wishes, ideas, doubts, etc. and end with new solutions that are tailored to the needs of a specific target group. Every organization's process can look a little different, but they are similar overall.

Donald Norman, former President of UNext Learning Systems, defines human-centred design in his book, *The Invisible Computer:*

> *"It's a process of product development that starts with users and their needs rather than with the technology. The goal is a technology that serves the user, where the technology fits the task and the complexity is that of the task, not the tool." (p.185).*[1]

### How does human-centred design influences the creation of online learning offers?

In the research study of the Erasmus+ project digiVET trainers and teachers in vocational education and training were asked about their needs for feeling more competent in providing online teaching. Most of them expressed the wish for more knowledge about digital tools and methods that they can use in online training. This wish is of course justified, because online teaching is more than a mere substitute for the classroom situation. The targeted use of creative and innovative online tools has a supporting effect on motivation, interaction and the level of commitment among the learners. But it is not enough only to know the tools and were to find them. It is of main importance to have the knowledge about the learning preferences of your audience, their feelings about online learning, their concerns and the difficulties they might face in their learning environment.

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[1] Rovy Branon, Brian Beatty, Jack Wilson: Developing Online Courses: A Human-Centred Approach, Indiana University and Option Six, Inc. Abstract.

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➔ **Success in online learning means knowing and understanding learners' needs**

Many factors influence learners' access to internet, technology, time and space to attend class and study, ability to work outside of designated class time, and physical and mental safety and wellness.

While engaging with computers, users, especially the younger ones, juggle more than one task simultaneously to achieve their goals, for example doing homework, listening to Mp3s and chatting with friends (Dede, 2005). Technology provides the users with flexible ways to learn by managing their tasks and freeing them in terms of time and space. This flexible learning has to be taken into consideration, when creating online learning offers. Personalisation of educational products and services tailored to individual needs insists on equal responsibility between all involved stakeholders. Incorporating learner needs into course design can improve their engagement and overall learning outcomes. Learners can be a resource to help make collective decisions on how to facilitate online learning. A participatory approach like involving learners as co-creators of course delivery can be an important step towards reaching this goal.

➔ **A sense of community and trust is key to effective online learning**

Pedagogically, interactions need to be intentionally designed to support building community. A further e-teaching qualification concept also has to include the examination of a specific learning concept, the teaching and learning approach, which means that teachers and trainers have to be qualified in the management of learning groups and the facilitation of learning. Especially the communication and interaction in the online space differs from the interpersonal encounter in face-to-face teaching. This means: observe your learners and their communication styles. Instructors across all courses have to make time to check in with students in a way they may not typically do for in-person instruction.

➔ **Assuming social norms online**

In connection with communication and interaction, this is also about agreeing on certain rules, guidelines, etc. for online interaction. What to do if a learner suddenly has problems with the internet connection and gets kicked out? Does "attending class" mean having the video on? What may seem like a triviality to us is even more important in an online context than in a face-to-face setting. Agreeing on the basics of cooperation at the beginning of the course is supportive for teachers and learners.

➔ **Make the most of shared (online-)moments**

Teachers have to reflect on the opportunity and purpose of their online meetings or classes. The synchronous moments should be the place where learners work through what is challenging for them. Is it a space for them to collaborate, build on one another's ideas, or create something collectively that they could not create alone. Input for self-learning or presentations should be moved to asynchronous phases.

**Conclusion**

Designing and building quality distance education is a challenge many organizations are facing. Few tasks are as complex as education and finding the "best way" to design online education and training is likely to be an elusive goal for quite some time. Human-centred development, however, utilizes input from learners in the target audience during the earliest stages of development. By having learners involved early, unnecessary complexity can be eliminated and learning effects can be maximized.

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