LESSONS LEARNED FROM A LIFELONG LEARNING REDESIGN

CASE: COURSE AT THE CENTRE FOR SAFETY AND DIGITALISATION



Samenwerken aan een veilig digitaal Nederland

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CASE: COURSE AT THE CENTRE FOR SAFETY AND DIGITALISATION THE PURPOSE OF THIS FLYER IS TO SHARE THE EXPERIENCES OF A LIFELONG LEARNING DESIGN AT THE UNIVERSITY OF TWENTE

CONTEXT

Digital Transformation is a fundamental change process in both society as well as organizations. Rapid information change and technological developments provide many opportunities, such as working more efficiently and gaining many new, helpful insights with the help of big data sets. However, it also poses a lot of challenges. How do we ensure a safe digital world? And how can we use available data in an ethical way? There is an urgent need for knowledge-sharing, collaboration and lifelong learning and development.

In order to facilitate the essential collaboration between different organizations in the field of safety and digitalization, the Centre for Safety and Digitalization (in Dutch: Centrum voor Veiligheid en Digitalisering, i.e. CVD) is established. In the CVD, public and private partners join forces with the ultimate objective of a safe and secure digital country. They do this by means of education, research, entrepreneurship and public activities. The CVD is physically located in Apeldoorn, which serves as a knowledge and innovation ecosystem. The University of Twente (UT) is one of the initiating partners of the CVD.

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GOAL & AMBITION

One of the lifelong learning programs of the CVD is the "Leergang Digitale Transformatie", which is developed in co-creation with the UT and three public and private partners. Ambition of this program is to accelerate the development of large groups of employees and to include them in the digital transformation, and more specifically on the subjects of data science, ethics, cyber security, and business IT, which are all integrated in the program as modules. Hence, a desirable outcome is that participants of the program will act as ambassadors to promote the theme of digital transformation in their organization. In 2020, the first edition of the program started as a pilot with 25 participants, expanding to about 50 participants in the subsequent editions. After three editions of this course, extensive evaluation showed that redesign was needed. This led to a design process after which the revised program was offered in 2022 for the first time. In the next paragraphs a brief overview of the process and outcomes is given.

DESIGN

After a problem analysis of the program, three guiding principles were formulated:

- The program serves a diverse group of participants (both IT specialists & generalists)
- The acquired knowledge and skills can be integrated with participants' daily work
- The program stimulates a continuous process of lifelong learning

These principles resulted in changes in the **didactical foundation** of the course, addition of a **transfer assignment** and a **reflection assignment**. The following section will describe the redesign and the lessons learned.

DIDACTIC FOUNDATION

DIDACTIC FOUNDATION: DESIGN

The **flipping the classroom method** was selected as the didactic foundation of the program, as it allows learners to prepare the theory in their own pace, and the in-person sessions can center on practical application. The participants prepared the theory beforehand with online study materials, so that the physical sessions could be fully centered around interactive activities, such as working on a case, group assignments and discussions. The new version of the program consisted of in total 10 live sessions, online study materials and a closing ceremony. An overview of the course is illustrated in the figure below.

Each module a **core teacher of the UT** was responsible for the design, and one or multiple **experts of the partner organizations** were involved in the execution. For instance, by offering a lecture, participate in a panel discussion or being interviewed by the participants. 77 IT WAS VERY INTERESTING AND WELL CONVEYED. BECAUSE OF THE HIGH LEVEL OF INTERACTION, EVEN MORE INTERESTING CONTENT WAS SHARED.

DIDACTICAL FOUNDATION: LESSONS LEARNED

The use of the flipping the classroom method seemed to be an excellent fit for this diverse group of learners. Overall, feedback from the participants indicated appreciation for the balanced blend of online self-study and the interactivity during the in-person sessions. A vast majority expressed satisfaction with the difficulty of the modules, which shows an improvement compared to previous editions where some of the participants found the materials either too challenging or too easy. Furthermore, the collaboration between the UT teacher and organizational experts converged the academic knowledge and organizational practice harmoniously.

The program offers participants a valuable opportunity to enhance their awareness of the specific modules and the broader scope of Digital Transformation, including its implications. However, they still struggle with how to directly apply their gained knowledge into their work practice. Further development of the course will focus on how to integrate the practice even more effectively, for instance by adding the topic of change management. Another notable challenge faced by the participants was finding time within their busy work weeks to dedicate to study the online materials. So, the flipping the classroom works as an educational method, however studying material independently does not come naturally.



TRANSFER ASSIGNMENT

TRANSFER ASSIGNMENT: DESIGN

In the transfer assignment, the participants worked together with colleagues from their own organization on a product that translated their gained knowledge of digital transformation into something that will enhance digital transformation in their company. To foster creativity of the participants in designing their product, the guidelines of the assignment were deliberately kept open. The final group products were presented during a festive closing ceremony where also the higher management of the organizations was present and reflected on the delivered products.

TRANSFER ASSIGNMENT: LESSONS LEARNED

The group assignment resulted in a great variety of different products, such as podcasts, business cases and a serious game. Overall, participants appreciated that they had something tangible that they could show their management and colleagues. The assignment stimulated collaboration between colleagues and by creating a physical product, the transfer from the acquired content to practice was enhanced. As the assignment was very broad, some groups experienced some difficulties to translate their gained knowledge into a specific product, which will be solved in later editions as existing products can then be used as examples. To avoid a heavy workload at the end of the program, it is recommended to spread the workload more evenly throughout the program.



REFLECTION ASSIGNMENT

REFLECTION ASSIGNMENT: DESIGN

The individual reflection assignment was added, in which the participants were asked at the start of the program to formulate learning goals, based on their background, motivational drivers and the challenges in their organization. After each module, they reflected on it by stating the main take aways, possibilities for application to their organization, remaining questions and follow-up actions. At the end of the program, they were asked to state the main gained knowledge and skills, their personal next steps and next steps for their organization. Throughout the program they received feedback from the instructors and their peers.

REFLECTION ASSIGNMENT: LESSONS LEARNED

The use of this individual learning path has taught several lessons. First, not all people are comfortable or motivated to reflect individually or prefer to reflect in a group. Second, the format for using such a template needs to be fully intuitive and user friendly for it to be used optimally. Third, when students experience the study load to be high, personal reflection is given the lowest priority.





77 THE BIGGEST BENEFITS FOR ME WERE SEEING HOW TWO OTHER COMPANIES VIEW DIGITAL ISSUES, AND GETTING TO KNOW COLLEAGUES THAT I WOULD OTHERWISE NOT EASILY MEET. - PARTICIPANT OF THE COURSE

WHAT'S NEXT

The collaborative partnership approach implies a constant development, adapting to the challenges and dynamics within the diverse organizations. As we tailor the program to the evolving environment, it prompts broader questions in the context of lifelong learning. One such inquiry revolves around striking a balance between the demanding professional lives of individuals and the imperative to comprehensively understand digital transformation and its impact on work. How can we collaboratively design programs that cater to organizations with diverse needs? Furthermore, how do we seamlessly integrate the development of cognitive competencies with action-oriented skills like leadership and reflective practices? These questions extend beyond the specific lifelong learning processes within CVD, resonating as universal challenges in the realm of lifelong learning..



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