Tampere University of Applied Sciences

Predesigned Course Templates

Helping Organizations Teach Online

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ABSTRACT

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The growing use of technology and digital learning environments present a challenge for organizations, teachers and trainers to facilitate technology in teaching and training. Teaching and training online can enable the flexibility of learning regardless of space and time. However, planning, preparing and developing an online course takes time and resources and requires skills and knowledge. Creating an online course can be seen as a project that requires elements of design thinking, knowledge of course design process and learning models as well as understanding the pedagogy behind teaching online. An answer to the growing need for providing online learning and to overcome to barriers in implementing technology in teaching online can be designing a course template. An easy-to-use template can make the move to online teaching easier and potentially lower costs and save resources related to designing online courses from the beginning.

This aim of this thesis was to determine how a predesigned course template can help organizations in facilitating online teaching and training. This thesis was commissioned by Mediamaisteri and the aim was also to find out ways of making their pre-existing course templates more useful for their customers.

Data were collected interviewing selected customers. The interviews were transcribed and analyzed using a thematic coding protocol. The collected data were used to ascertain what course creators need in a template for it to be as useable as possible.

The analysis revealed three main themes: user experience, learning design and motivation and instruction. Therefore, to be useable the template offered should have a layout that makes navigation on the course easy, takes visuality in consideration and is easy to use for the course creators. The template should follow learning design protocols and facilitate activating and motivating learners.

A well-designed course template comprises of learning design and pedagogy. Having the option of using a course template can make facilitating online learning quicker and easier. It can also allow course creators to learn the basics of course design and make the switch from traditional classroom teaching a little less tricky and taunting.

Key words: elearning, learning design, course template

CONTENTS

1 INTRODUCTION

Technology changes the way we work, the way we communicate and even our values of life (UNESCO 2015). The rapidly digitalizing worklife poses new challenges for educational institutions and organizations in general. Education and lifelong learning have become a pivotal tool in boosting productivity, preventing unemployment and maintaining organizations competitiveness in growing global markets. The growing use of technology and digital learning environments present a challenge for schools and teachers along with the expectations of the modern society and goals in the curriculum that demand teachers to facilitate technology in teaching. (Opetushallitus 2014.)

Moving teaching and training online can enable the flexibility of teaching and learning regardless of space and time. The challenge is that this move online is expected to happen in a staggeringly fast pace. Typically planning, preparing and developing an online course takes time and resources and requires skills and knowledge. For a beginner the process is most likely time consuming and takes a few tries to master. (Hodges, Moore, Lockee, Trust & Bond 2000.) Creating effective online courses can be a tricky task. It is easy for experienced learning designers to recognize a good course and to design one. However, sometimes the fact is that courses lack the consideration for basic design and a Learning Management System (LMS) is used as a medium for delivery of materials created for another framework all together. (Carr-Chellman & Duchastel 2000, 229.)

When it comes to onboarding new employees or organizing further training in an organization or education in general, more and more training and teaching is done digitally. Organizations acquire Learning Management Systems to facilitate training and to function as a platform for competency management. Where HR professionals and teachers often have expertise in education, they don’t necessarily have expertise in digital pedagogy and instructional design. Not all organizations have the resources to set up an expert unit for educational technology to create learning materials that subject matter experts have produced. Most of the time, the trainers and teachers do the part of designing the curriculum as well as creating their teaching materials for the learners. However, the effectiveness of

the teaching materials from the perspective of a trainer may not be aligned with the needs of the learners. Often there's a gap between the trainer's perspective and the learner's perspective. Learning design is there to minimize that gap. In other words, without proper learning design, the teaching materials may not be as effective as what the trainers may believe them to be. Poorly designed courses may not be able to help the teacher or trainer achieve the desired learning outcome or help the learners reach the learning objectives and this is where learning design comes into the picture. (Bates 2019.)

In her doctoral dissertation Mari Kyllönen (2020) examines Finnish teachers' digi-pedagogical skills and their acceptance of use of technology in pedagogy. She states that teacher's trust in their own skills for using technology in teaching is lower in Finland than the average in Europe. Kyllönen says that using technology for teaching emphasizes pedagogy over technology and that technology as a tool for teaching is easier to accept if the teacher feels self-efficient in using technology and believes in its pedagogical usefulness. (Kyllönen 2020.) It can be said that when teaching online some teachers and trainers use technology enthusiastically where as other find it difficult and feel they lack the time, energy and experience to incorporate innovative learning tools in their courses (Bachman & Stewart, 2011, 180).

An answer to the growing need for online teaching and the possible barriers in implementing technology in teaching can be designing a course template to help provide an easy-to-use way to facilitate teaching digitally. Not only can a template make it easier to start teaching online, but as Bachman and Stewart (2011) state it can potentially lower costs and effort related to developing courses and teaching online.

This thesis was commissioned by Mediamaisteri. As an expert in digital learning and competence development, Mediamaisteri strives to help their customers make the most of their LMS by providing training and assistance in designing content. A designed to order -course can be an expensive project and not all customers have the resources to acquire content this way. Also, organizations have more and more subject matter experts that are ready and willing to create

the content but lack the skills to design a course. Therefore, Mediamaisteri wants to provide a template that will help with the design part of course creation.

To ease the implementation of online learning and designing online training content, a rough outline of a course template was introduced as part of installation of the LMS. This project aims to develop those templates in accordance to the need of the customers. The aim is to offer a solution to the possible lack of skills in learning design and digital pedagogy.

Research questions

1. How can a predesigned course template assist organizations in providing effective training/teaching for their learners?
2. Are the templates offered at the moment instructional enough to be used effectively?
3. What are the properties the customers need in order to make use of the templates?

In this thesis learning design will be used as a theoretical framework to determine what elements need to be considered in order to create effective online courses. Interviews with selected clients of the commissioning company will determine what organizations want and need in a template for it to be useable. The data from the interviews will then be compared to the theoretical framework to determine how the current template should be developed further.

2 THEORETICAL FRAMEWORK

2.1 Learning Design

At its core learning design is creating learning materials resulting in acquisition and application of knowledge and skills. It's a systematic procedure that leads to developing educational and training programs using different learning environments. (Seel, Lehmann, Blumschein, & Podolskiy. 2017.) In his article Peter Goodyear (2015) says that teaching needs to find ways to invest more in the planning and have more of design qualities in the planning of teaching. He argues that spending time on design will eventually help teachers cope with the pressure on the quality of their work and to create better learning opportunities for their students. Mr. Goodyear has a point; learning and teaching should be designed. Moreover, they should be designed in a way that makes learning interesting and motivating. To achieve this there is one thing to consider; it is not solely about the content but the way the content is taught. In her book, Design for How People Learn, Julie Dirksen says: "The goal of good learning design is for learners to emerge from the learning experience with new or improved capabilities that they can take back to the real world and that help them to do the things they need or want to do." (Dirksen, 2016, 3.)

Learning design allows the learner to be an active participant in the process. Creating successful online courses can be a tricky and sometimes taunting task. It is easy for experienced learning designers to recognize what constitutes an engaging online course and take into consideration how to avoid making an online course a simple depository of materials to be delivered to the learners. However, for a beginner or a non-expert it can be extremely resource and time consuming. (Carr-Chellman & Duchastel 2000, 229.)

Learning design is both scientific and artistic; it implements the science of teaching and learning infusing it with a creative way to present information and tasks. When done right, learning design helps solve problems and is a tool for producing some of the most affective learning possible. (Moller & Harvey 2013.) This is something to keep in mind whether we are creating course templates for teachers

and trainers to use or building courses from the beginning; learning design is an important factor in the process (Dirksen 2016, 2).

2.1.1 Design Thinking

When the concept of teaching or training online comes up, the first thing that comes to mind is probably not design. For teachers and trainers alike, the initial concern is most likely content, activities and assessment. However online courses are always designed. Some better than others but none the less, they are designed. Design thinking is a methodology that is powered by the aim to understand what people want and need. In his article in Harvard Business Review Tim Brown (2008) calls design thinking “a human-centered design ethos”. Design thinking is a way to take on design challenges by applying empathy. It is collaborative problem solving, a culture that fosters experimentation and a mindset for curiosity (Mootee 2013, 32). It is an ideology that implements a user-centric approach to problem solving with an aim on innovation. This ideology is defined by the design thinking process that comprises of understanding, exploring and materializing. (Gibbons, 2016.)

Understanding consists of empathizing and defining the problem at hand. A designer gathers information on the users (i.e. learners) to develop knowledge about their own perspective on what they need. The information gathered is then combined to observe where the problem is in order to begin highlighting opportunities for innovation. Exploring begins with ideating. This is where a designer has total freedom to formulate ideas, preferably with a team, to address the needs identified in the previous phase. Ideas are shared and mixed with the team building on others’ ideas. This ideating leads to prototyping where the goal is to understand which ideas work and let go of the ones that don’t. In this phase the team builds a real representation of the chosen idea (i.e. an elearning course). Materializing means putting the prototype of your idea in front of the users for testing and feedback. The final phase of materializing is implementation where the idea is put into effect with a goal of ensuring that the solution the team came up with touches the lives of the users. (Gibbons, 2016.) The process is pictured below (figure 1).

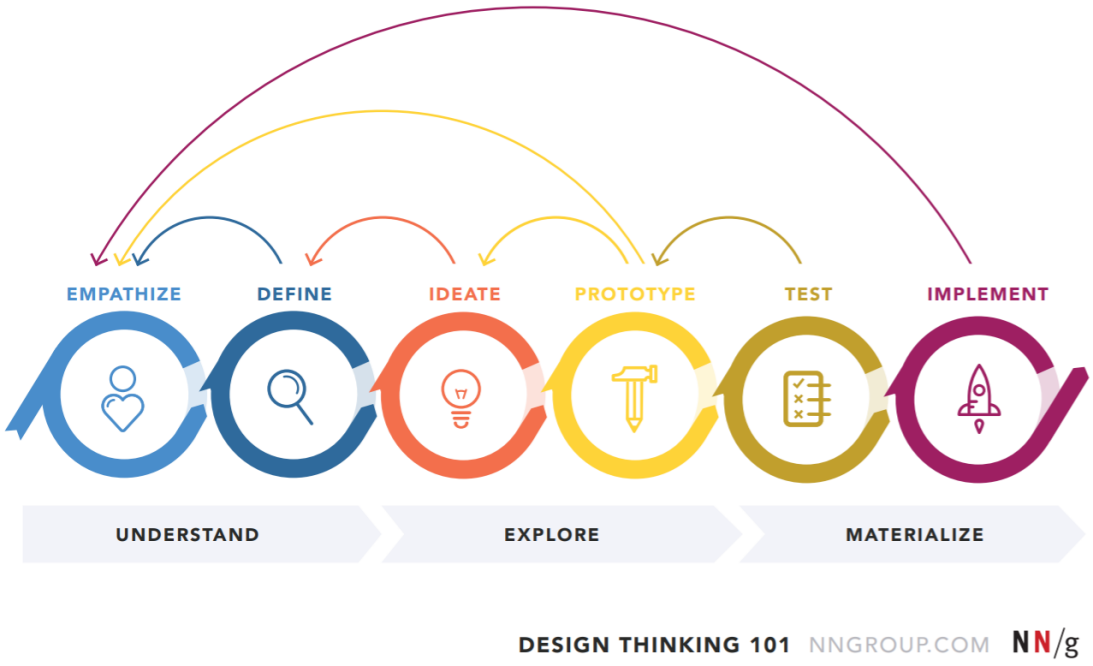

FIGURE 1. Design Thinking 101 (Nielsen Norman Group 2016).

Online learning can and should be designed with a design thinking -mindset. Traditionally teachers and trainers are used to creating their courses alone. This silo mentality, a reluctance to share, can, in fact, reduce efficiency and should be challenged. When an online course is created using design thinking, collaboration and forming of interdisciplinary groups should be encouraged. The course is designed specifically for the learner. In an ideal situation, learners are a part of the process of designing the course or at least have the opportunity to give feedback. (Gachago, Morkel, Hitge, van Zyl & Ivala, 2017.)

Gachago et al (2017) point out that when coming across a problem to be solved, academics have the tendency to “jump too quickly at established solutions”. This does not provide a deep understanding of the problem. Instead of a quick solution, i.e. a course that simply hands out material, the course creators should spend time exploring the problem (such as a course design) from many different viewpoints thus remaining in the problem space longer. An in-depth view of the course might be the key to guide the visualization of the learner’s experience on the course in terms of activities, tools, collaboration, assessment, support and outcomes.

Educational technology is here to create more tools for the teachers, trainers and learners to use. The challenge is in training teachers and trainers in using those tools properly. It isn't purely the technical aspect of using different technology but more so the understanding of the interrelationships between the users, tools and different practices in using them. Course creators need ways to see their relationship towards technology as complex, dynamic and continuously evolving. This will help them develop a nuanced understanding of the capabilities as well as the constraints of technology in education. (Mishra & Koehler, 2003.) Whereas the typical characteristics of a design thinking mindset (being comfortable with situations that have no predetermined outcomes, managing uncertainty, being empathetic to the needs of users) or the ways to implement those characteristics in practice (collaboration, visualization, testing, iteration) are not natural talents, they are things that can be learned. Creative problem solving is a skill that can be developed. (Gachago, Morkel, Hitge, van Zyl & Ivala, 2017.)

If we look at designing and creating an online course that is an engaging, motivating and activating experience for the learners as the problem to be solved, the issue at hand might be the time, resources and knowledge to implement design thinking. The solution to the issue might be a course template that helps implement the concept of design thinking without having to spend the time and resources to familiarize all course creators, teachers and trainers with it.

2.1.2 Course Design Process

In order to deliver the content of a course in an engaging, interactive and interesting way, course creators need to develop the appropriate instructional strategy that will help the learners to achieve the desired learning objectives. Without doing proper analysis and following the course design process the risk is that the content misses the real desired outcome and the right learning solution is not designed. (Bean 2014, 51-52.) An important guideline is to align the course components so that every assessment title, whether it be an assignment or quiz, can be matched up to the desired outcomes of the course. The overall design and structure of the course should be clear and therefore the course design should

always include an orientation, introduction, syllabus, overviews and summaries. (Nilson & Goodson 2017, 39.)

There are many different ways to visualize and explain the course design process. Most of the models guide the course creator to design the course in a specific order. Whichever course design model you use, it should be kept in mind that a good learning experience is the product of prototyping, reviewing and iteration. (Bean 2014, 34.) The course design process can be described in a linear way, but taking into consideration the iterative nature of course design, a circular process model might be a better choice.

Course creators need to have use of a model that provides a clear path to a successful eLearning course. A model that works investigates alternatives, delivers a project in time and within a set budget, saves time and resources and keeps stakeholders informed. Most of all a successful model develops learner's skills and improves their performance. A fairly known model for course design is ADDIE and its five stages; analysis, development, design, implementation and evaluation (figure 2). The ADDIE-model has many different variations of its use and is usually adapted and modified to fit the needs of the course being designed with it. When designing an online course iteration is a necessity. The challenge is that the basic ADDIE model is not iterative. Many course designers have criticized it for being too linear, inflexible and too constraining. (Allen 2012, 2-3.) This being said since the ADDIE model seem to be traditionally used by course designers, it is justified to use it.

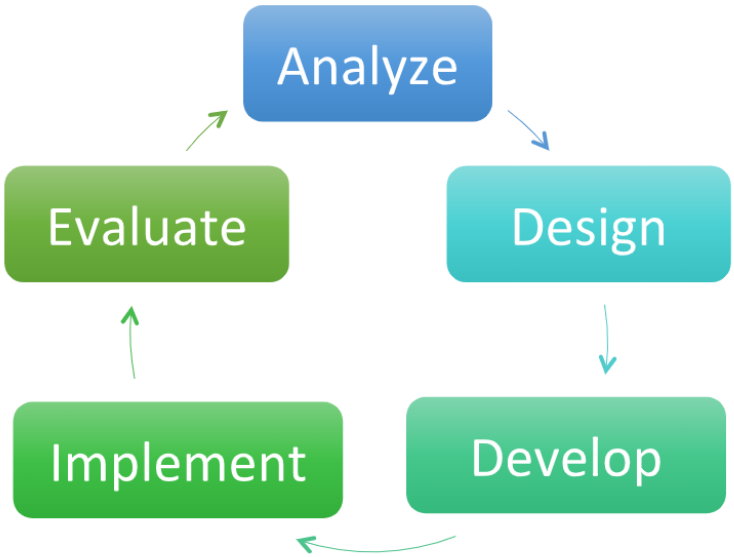

FIGURE 2. The ADDIE-model.

The analyze-phase aims for identifying the gap in performance and the reasons behind that gap. After completing this phase, the course designer should have an idea of what if anything the course can do to help close the performance gap. (Branch 2009, 22.) Identifying the gap is a key element in designing effective online courses. A course designer needs to know where the gaps are, what they are like and how big they are. (Dirksen 2016, 26.) If the course creator is dealing with a knowledge gap the questions to ask are; what information is needed and what is the best way to give that information? If the gap is with the learner's skills the designer should ask what the learners need to practice and where they can practice the skills needed? The gap can also be with motivation, habits, environment and communication. To bridge these gaps, it would help the designer to know what the learner's attitudes toward learning something new is, does something need to be unlearned, is the environment optimal for learning and does the learner know what the goals are? (Dirksen 2016, 24.) Common ways to finalize the analyze-phase are validating the performance gap, determining learning goals, knowing who the learners are, finding out available resources for the course, deciding on information delivery systems, composing a project management plan for the course (Branch 2009, 24).

Design is the stage where the desired performances and appropriate testing methods are verified. When the design-phase is completed, the course designer

can prepare the functional specifications for closing the performance gap. (Branch 2009, 58.) These include all the components that will comprise the content of the course. In the design-phase the learning goals, learning design and evaluation are determined. The result of the design phase is a prototype of the course. The prototype includes the description of learners (target group), learning objectives, a list of activities and resources, a description of required technology, an estimate of time required to complete the course and a plan for evaluation. (Yeh & Tseng 2019, 88.)

The main goal of the development phase is to organize the collected materials and technology tools and integrate these on the course creating course content that align with the objectives (Yeh & Tseng 2019, 88). The result is a set of learning resources that among the activities and materials to facilitate construction of knowledge and skills, include the media to support learning on the course. By the end of this phase the course should be divided into modules and each module should have instructions to guide the learner along with elements of interaction and revision. (Branch 2009, 58.)

The implementation-phase refers to the delivery of the course to the learners. The learning environment is prepared and the teacher's or trainer's role from this stage on will be to ensure the learners understand the materials, facilitate learning and learner engagement on the course as well as assess the learner's ability to transfer knowledge. (Yuh & Tseng 2019, 89.)

The evaluation-phase will be where the quality of the course and its effectiveness are assessed. After the evaluation phase the course designer will have recommendations for improvements on the course that have come up after the implementation (Branch 2009, 150). During the evaluation phase the teacher or trainer will be able to identify whether or not the content of the course meets the objectives and the needs of the learners. This is a vital phase in the ADDIE-model due to giving the possibility to discover any problems on the course that might hinder learning. (Yuh & Tseng 2019, 89.)

Whereas ADDIE was originally designed to be a project management tool and is not necessarily iterative in nature, the Successive Approximation Model, SAM,

was designed purely for the purpose of having an agile e-learning development process that will help create performance-driven learning. The successive approximation model (SAM) allows for the creation of a clearly defined and iterative process that supports collaboration for designing an online course. Though the simple way of describing basic iteration would be design, develop, evaluate and repeat, SAM is a bit more complex than that. (Allen 2012.) The rapid prototyping methodology that SAM represents was designed as a solution for the demand to create high quality course content without using too much time and money in the design and development process (figure 3) (Jung, Kim, Lee, & Shin 2019, 192).

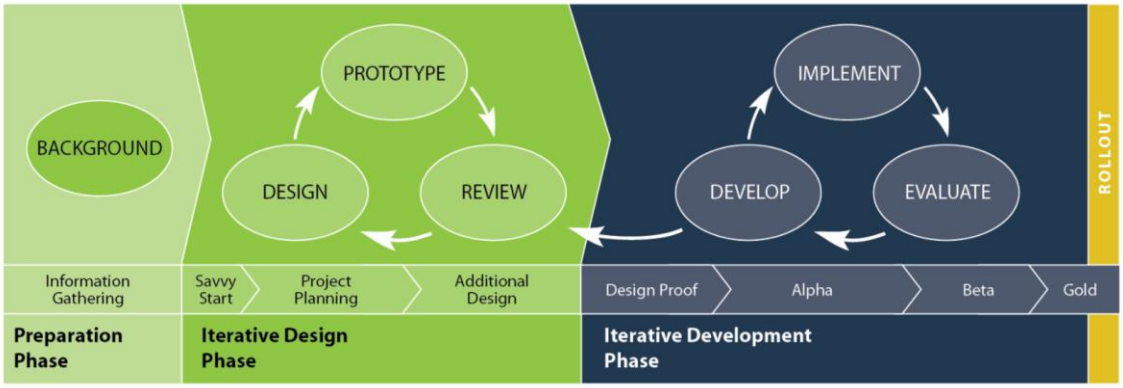

FIGURE 3. The Phases of SAM (alleninteractions.com/sam-process).

SAM consists of three main phases: preparation, iterative design and iterative development (Jung, Kim, Lee, & Shin 2019, 193). Each phase can be cycled in order to ensure the creation of the best learning design possible (Wintarti, Abadi & Fardah 2019, 2). The process starts with a preparation phase called the savvy start. During this phase the information and background knowledge relevant to the project is gathered. (Jung, Kim & Lee 2019, 193.) The second phase is Iterative Design where an initial prototype will be designed by rotating it through reviewing, designing again and prototyping again. The emphasis is on an iterative approach with the goal of designing the right course content. (Wintarti, Abadi & Fardah 2019, 2.) In the final phase, iterative development, the course design is rotated through developing, implementing and evaluation. After the iterative development phase an alpha version is released and the evolved into the beta version before rolling out the final product, the gold version of the course. (Jung, Kim & Lee 2019, 193.)

A course is always an investment whether it's done face to face or online or as a combination of the two and that is exactly the reason it should always be planned and implemented carefully and with time. When designing a course, the first three things that should be asked are: What do I want the learners to learn? Who are the learners? How should this content be taught? By answering these questions, the course creator will have a justified and defined basis for a course directed to the correct group (figure 4). Designing an online course is like designing any lesson.

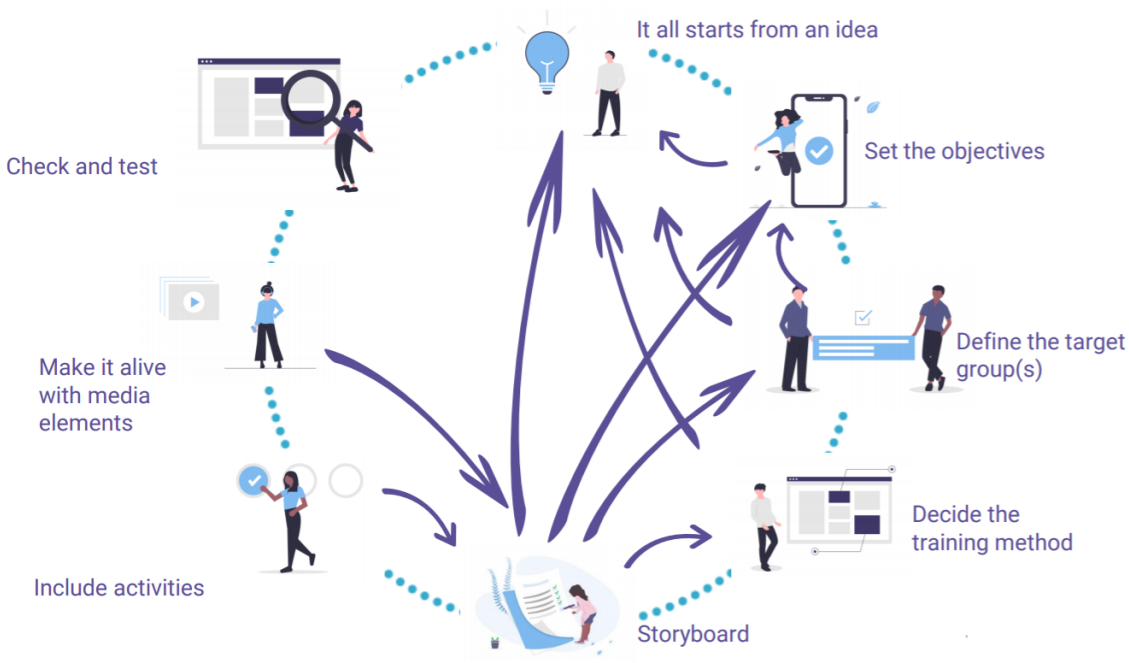

FIGURE 4. Learning design process.

The starting point is setting the goals. Goals should be defined clearly, and consideration should be given to how the learners can achieve the goals and how those goals can be measured. Being able to achieve the goals on the course is a motivating factor and should be kept this in mind when setting them. (Rahja & Perämäki 2021a.)

When designing the content, it's important to know who the learners are. What level of previous knowledge on the subject matter do they have? What age are they? What is their skills level when it comes to educational technology? According to these factors the content can be created on an accurate level and using

appropriate language and technology for the learners. It's imperative to create the content as inclusive as possible so that the learners don't lose their motivation. It's a rather common misconception that the generation who were born in the middle of a high-tech world automatically know how to use that technology for learning. The course needs to have instructions for learning. (Rahja & Perämäki 2021b.)

Before you move on to writing the script for the actual content, the course creator should take a moment to think about the teaching method. Is the course going to be purely self-study or is their going to be an orientation online followed by teacher led studying or perhaps using the LMS for the learners to acquire basic knowledge on the subject matter and then moving on to hands-on training with the teacher? The teaching method should be considered mirroring the goals and objectives set for the course. (Front 2021.)

After these phases of the process are done it is time to move on to the most creative and at the same time challenging part of the course creation process; the script. If material is already accessible, it can be used but should be reviewed review critically. A Power Point presentation made to visualize a lecture is not material that should be used as is. The material used should be able to, standing alone, teach the learners what it is meant to teach or what it would teach if the teacher or trainer was here in person to explain the content. When wiring the script or the content for the course these points should be taken into consideration:

> Everything that is not relevant or important for the learners to know should be left out. All the things that are nice for them to know, should go or should have a separate section for further reading.
>
> A clear structure for the course should be created. Everything the learners are expected to view or do should be visible on the course. The course should be easily navigated.
>
> Things should be presented in a clear manner. When creating content jargon or professional language should not be used without

> providing explanations to the terms used. The contents should be kept simple but challenging enough to be activating. Examples to help the learners apply what they've learned and put it into context should be used. (Manner 2021.)

The longer the learners have to spend reading or watching a video of "a talking head" the sooner they will lose their focus and interest. Listening to a teacher in a classroom is completely different than listening to the same thing on video or reading longwinded text from the screen. The passive and monotonous cramming of information should be disrupted with interactivities; tasks and activities that make the learners think about what it is that they are learning. A good task or activity increases learning and activates the learners' thinking. (Bean 2014, 81-105.)

Plain text numbs the senses so different media elements should be used to brighten up and visualize the course as well as to enhance learning for the learners. Images can be used to concretize the content. However, media elements should be implemented with consideration. The saying "a picture is worth a thousand words" applies only when images and other elements that align with the content are used. Otherwise they might be liable to become a distraction. Sound and video can be used to make the course content more alive. But again, it should be pointed out that videos on the course should be short and informative. (Manner 2021.)

The layout of the course should be clear and clean. This increases motivation and enhances learning. This in mind everything that doesn't have a purpose on the course should be left out. As soon as the learners enter the course, they should easily find out the goals of the course, the main topics the criteria for passing the course and the schedule. The content should be divided into clear sections. Empty activities, broken links, excessive scrolling and hidden elements should be avoided. These can become deal breakers when it comes to keeping up the student's motivation. The course should never appear as a maze the students are afraid to step into. (Bean 2014, 143-177.)

When everything is ready and, in its place, the material should be reviewed to make sure everything works the way it was intended to. Someone from the target group or a colleague can be asked to have a look at the course and give comments. Course design should be an iterative process; it evolves with the help of learners and colleagues. Everything on the course should be checked and the settings set so the LMS will help track progress and help everyone be on the right track for learning. (Rahja & Perämäki 2021b.)

When the process of developing an eLearning course (figure 4) is somewhat familiar, it is time to have a closer look at the design of a course. The next chapter is going to introduce a few learning models commonly used in course creation.

2.1.3 Learning Models

The learning model can be essentially described as being the design approach that is used in creating a course. “Learning models are the patterns of interactions and activities to ensure any learning you create is effective” (Bean 2014, 52). If we aim to create effective courses, we need to design them to accommodate how people learn (Dirksen 2016, 3). This chapter will demonstrate an outline of three learning models: Gagne’s nine events of instruction, Bloom’s taxonomy and Scaffolding. There are several more theories and models, but these three were chosen because they and implementations of them are often used by learning designers.

Gagne’s Nine Events of Instruction

If the course has assessable learning objectives it is imperative to make sure the learner understands the course material and has the mechanisms needed to build their knowledge and skills on the subject matter being taught. Gagne’s Nine Events of Instruction follow a somewhat standard sequence to provide a framework for training adult learners. Gagne’s idea was that effective learning involves a series of events that begin with gaining the learner’s attention. From there the trainer or teacher uses a series of steps to develop learning expectations, introduce new information and facilitate recall of related ideas to help the learner move

concepts from short to long-term memory. At the end of the series of events the learner is able to draw from what they have learned and apply the acquired knowledge and skills into new situations. From this theory Gagne developed a nine-part learning approach that mirrors the cognitive stages of this adult learning process. (Zhu & St. Amant 2010, 341.)

The first instructional event is gaining the learner's attention. The new information provided by the teacher or trainer activates the receptor's in the learner's brain. (Zhu & St. Armant 2010, 342.) Capturing the learner's attention includes ensuring they understand why the subject is important for them to learn. In an ideal situation the learners should be stimulated by something surprising and even fun. In an online course this can be a narrative hook, a synopsis of the learning objectives, information about deadlines and any information pertinent to the learner's success on the course. To provide novelty, instead of text, this information can be given using a short video (Jeffrey & Ahmad 2018, 5.)

The second stage of Gagné's Instructional Events is informing learners of objectives. The syllabus of the course is a part of this step. The learners are informed of the expectations and the means of meeting the course learning objectives. Objectives and assessment criteria should be communicated clearly to the learners in order to provide them with a framework of the course. (Jeffrey & Ahmad 2018, 6.)

After presenting the course objectives, the teacher or trainer should help the learner simulate recall of possible prior experiences. The idea is to connect new information provided on the course with previous experiences to provide context (Zhu & St. Amant 2010, 8). Relating information to something the learners already know makes it easier to better understand and retain new information. On an online course a good way to bring up prior learning is a discussion forum. (Jeffrey & Ahmad 2018, 6.)

The fourth stage is presenting the content of the course. The material on the course should be presented in different ways to keep the learners active and motivated. Resources given to the learners should represent different viewpoints in the subject being taught. The teacher or trainer should consider using different

media elements on the course. One of the most important aspects of effective course design is facilitating interaction. (Jeffrey & Ahmad 2018, 6.)

The fifth stage is to provide learning guidance. This helps learners transfer the information provided on the course to long term memory. It was Gagné's belief that in order to apply new skills and knowledge depends on learners' ability to draw from their long-term memory system. As the learners are exposed to new stimuli and information, the teacher or trainer offers explanation and questioning; ie. instructions on how to learn like guided activities and study guides. The course material should provide examples of how the information on the course relates to real-world experiences. (Jeffrey & Ahmad 2018, 8.)

According to Gagné, once new information and knowledge have been transferred into long-term memory, teachers and trainers should provide a way to recall and use the knowledge learned (Zhu & Armand 2010, 13). Learner's appreciate the opportunity to assess their learning via nongraded quizzes that are nonthreatening and provide stress free feedback. This way of recalling and applying new information is called eliciting performance. (Jeffrey & Ahmad 2018, 8.)

The seventh stage is providing feedback. Learner's should always receive feedback on individual tasks. This helps correct possible problems in learning. Learners benefit from a wide variety of feedback. It provides them with a chance to refine their ideas and improve their work. (Jeffrey & Ahmad 2018, 8.)

Assessing performance helps identify the content on the course they have not completely mastered yet. The teacher or trainer should utilize different methods of assessment ie. exams and quizzes, projects and written assignments. The most important criteria for assessment should be the ability solve complex problems. This requires the learner to be able to cope with a rhetorical situation in order to solve a practical problem. (Zhu & St. Amant 2010, 22.)

Enhancing retention and transferring knowledge and skills in to the job is the ninth and final stage in Gagné's nine events of instruction. The teacher or trainer should provide the learners opportunities to relate the course content with their personal experiences. The learners should be allowed the chance to reflect on what they

have learned and how they will use this in the future. Learning the course content in the context it will be used in will improve retention and understanding. (Jeffrey & Ahmad 2018, 9.)

Blooms Taxonomy

Bloom's taxonomy was created by educational psychologist Dr. Benjamin Bloom. It defines six levels of thinking or learning that span from the basic level of remembering information to deeper learning and the ability to apply and finally create (figure 5). (Adams 2015, 152-153.)

Bloom's taxonomy is based on a hierarchical ordering of the cognitive skills of a learner. This hierarchy can be used by course creators to design online courses in a way that helps learners learn. Bloom's taxonomy helps with understanding which level is required when learning something new; is remembering enough or is application to new situations needed. (Adams 2015, 152-153.)

The teacher or trainer creating the course can use Bloom's taxonomy when defining the learning objectives to describe the knowledge and skills the learner is supposed to achieve on the course. It can be visualized as a pyramid of human thinking skills where the lower cognitive domains ascend to the higher domains. The majority of the content on a course should land on the middle of the pyramid. If the majority of "must know" objectives on the course land on the top parts of the pyramid, the teacher or trainer should critically consider whether or not the objectives are realistically achievable. (Arneson & Offerdahl 2018; Huhtanen 2019.)

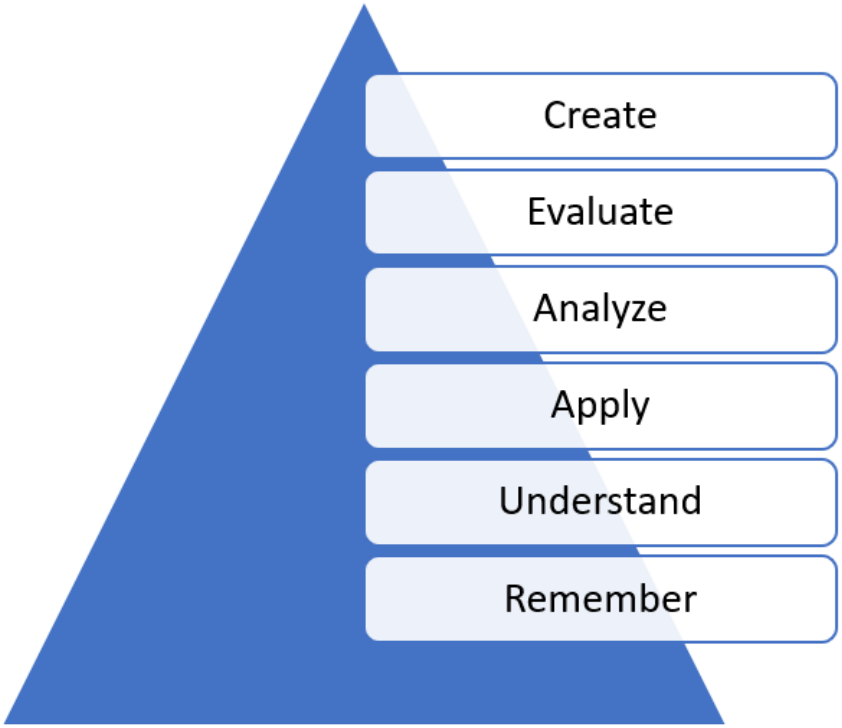

FIGURE 5. Bloom's taxonomy.

The cognitive domains of Bloom's taxonomy are presented as measurable verbs; remember, understand, apply, analyze, evaluate and create (Zaidi et al 2017).

Scaffolding

Scaffolding is a method of learning design where the learner is progressively moved toward independence and understanding during their learning process. Basically, it is designing the course building supports so that the learning incline isn't too steep for the learner. The purpose is to gradually reduce support on the course until the learner can handle the incline on their own. (Dirksen 2014, 42.)

Scaffolding is cognitive support that the teacher or trainer provides on the course to allow the learning of more complex ideas that learners could achieve on their own. It emphasizes that support is provided when the learners need it so that they can advance on the course. The concept of scaffolding is originally derived from Vygotsky's sociocultural theory where he describes that learning occurs in the zone of proximal development. The learner's development is compared to what

they can achieve with guidance from or in collaboration with an expert. The zone of proximal development is based on three points; what the learner cannot yet do, what the learner can do with guidance and what the learner can do unaided. (Schutt 2003, 3.) To put it simply, scaffolding on a course means that the teacher or trainer refer from supplying a solution to a problem but rather provide assistance to the learners by giving just enough guidance to help them progress on the course (Herrington & Oliver 2000, 40).

2.2 Pedagogy in teaching online

The key to designing an effective online course is a clear pedagogical approach. Traditionally, in a classroom setting, learners depend on the teacher when it comes to their motivation, setting goals, monitoring progress and achievement as well as assessment. The education field recognizes learning to be a process of knowledge construction. (Sun, Williams & Liu 2005, 309.) A fundamental part of knowledge construction is the active role of the learner that is made possible by encouragement and giving reason to act independently and in a self-directed way. To accomplish this the course settings and activities should be designed so that learners can assume responsibility in what and how is learned. (Oliver 2001, 2.) To facilitate this, course creators need to make sure their learners comprehend the materials and are provided with the mechanism to retain the required knowledge. In organizational training the objective is usually to help organizations perform better and in attempting to achieve this the employees are given information and the tools to apply that information. After an effective course they can make the connection between the information and what they need to do with it in order to perform. (Bean 2014, 57.)

Online learning has played an important role in offering more flexibility and quality in education and training. Collaborative technologies make it possible to learn in a flexible and diverse manner as well as makes learning content accessible asynchronously. However, technology alone does not generate added value to teaching and learning and should not be the driving force behind course design. Instead of technology alone, courses should be designed focusing on employing the appropriate learning theory and paradigm as well as methods and techniques

for delivering the content. (Sun et al. 2005, 309.) As it is online learning tends to be limited to offering content and assignments and is driven by the technology used for implementing online learning. The content on offer is organized according to the functions of the software used. In a worst-case scenario this results in technical limitations and availability of the software to be the basis of learning when it should be the association between related contents and materials. (Sun et al. 2005, 309.) Learners should be exposed to content that provides perspective from multiple sources without making the facts the focus on the course. Instead courses should be designed so that the content of the course is the resource for learning, not the focus of it. It is also important to consider that not everything has to be online. Learners need to have access to resources in different ways without strictness and rigidity on the course. (Oliver 2001, 3.)

Knowledge construction and constructivist learning theory underlines the importance of encouraging learners to take responsibility for their learning process. Critical analysis and reflection are more important than simply acquiring knowledge. Analysis and reflection are the way to deep learning which is the root of knowledge construction. (Sun et al. 2005, 309.) Also, social interaction is in a critical role when it comes to learning and cognition. The constructivist theory emphasizes that learning is a process where personal understanding and meaning making are important factors. Learning is seen as construction of meaning not merely memorizing facts. This way information is more a tool to be used, not merely facts that are stored (Oliver 2001, 5.) Learners construct their own reality and interpret it based on their perceptions and previous experiences. Knowledge comes from interaction and learning is motivated by cognitive conflicts and problems to be solved. In a traditional classroom, learners have little opportunity to manage their learning. However, the constructivist view emphasizes the learners' role as the initiator of their own learning. (Sun et al. 2005, 309.)

Traditionally in organizational training the objective might be to build knowledge and skills, whereas in an educational environment the objective is to support the learner's growth. The goal is to provide the learner with tools to help them grow personally and to facilitate the continuous regeneration of their identity. Therefore, in addition to substance, learners are given support in developing their metacognitive and reflective skills. (Kukkonen 2018, 118.) Whether the objective is

to study for a degree, learn a new skill or complete mandatory training an important factor to decide is which is the most effective way to implement an online course, synchronous or asynchronous learning. Synchronous courses happen in real-time and the learners on the course engage in learning somewhat simultaneously. Synchronous learning enables learners to collaborate with the other people on the course as well as get guidance from teachers or trainers almost real-time. The nature of synchronous courses is often social thus enabling sharing ideas and opinions and making group activities possible. Asynchronous courses are more individual, learner-centered, in nature. Learners are able to complete courses without the constraints of place and time. Asynchronous courses offer more flexibility to the leaners allowing them to progress at their own pace. Collaboration is not at the same level as in synchronous courses (Lawless 2020.) When designing courses or course templates the different nature of these two different ways of support learning should be taken into consideration. For this thesis the focus was on asynchronous courses.

Kukkonen (2018) identifies four counterparts in learning. These counterparts have a role in activity, objectives, ways of working and observed content on a course and they can be used to help a learner understand why certain materials and activities are being introduced on a course. When a learner understands why things are done in a certain way, the course and its content will become meaningful. The change in the emphasis of the counterparts will result in a change in the learner's activity on the course. The counterparts are:

Substance – Growth

It is important for the learner to understand what the objective of different activities and tasks on a course are. When designing an online course, the emphasis varies between factual resources and reflecting on a learner's personal growth.

Concrete – Conceptual

Things, phenomena and events can be examined from a theoretical or from a practical point of view. In an online course the emphasis may vary between theoretical and practical.

Teacher-led – Learner-led

Defining responsibilities, the emphasis on the different stages of working on a course varies between the learner being the more active party or the teacher being the one who facilitates learning i.e. planning, knowledge acquisition, activities and assessment.

Individual – Collaborative

Clarifying the way of learning and working on a course.

Kukkonen (2018) emphasizes that these counterparts are like two sides of a coin that together form a whole. Both parts are needed, and learning can be seen as a continuous dynamic movement between the counterparts. This is an interesting concept to consider when creating online courses. For traditional corporate training or asynchronous courses, the emphasis is more likely to be on substance over growth, concrete over conceptual, teacher-led over learner-led and individual over collaborative. Whatever the counterparts that are emphasized, it is imperative to maintain a balance in order to create courses that facilitate successful learning experiences (Annala & Karlsson, 2021).

To sum up, pedagogy is the art and science of helping people learn. When it comes to teaching, online or in a classroom, having pedagogical knowledge plays a critical role in the process of teaching and learning. When it comes to online learning, learner experience is one of the most important factors in ensuring a learner's desire to continue learning online. Course templates can help set up courses in a pedagogically sound way and enhance learning and learner experience. (Griffits & Cook 2018, 1-6.)

2.3 Course templates

The term course template can be used to refer to a framework for a course site that is made available on the course platform to the teacher or trainer who creates the course content. A course template is more developed than a blank course format but requires the course creators input in the form of learning content that composes the core activities and materials on the course. (Hill, Fresen & Geng

2012, 4.) A course template can be thought of as any other tool for creating online courses. It gives the teacher or trainer a foundation to build on at the same time making them responsible for customizing it for their needs. (Pappas 2021.)

With educational technology and learning management systems developing and evolving in giant steps there is a multitude of options available for course creators. This can be overwhelming and confusing for teachers, trainers and students alike. (Scutelnicu, Tekula, Gordon & Knepper 2019, 275.) For many trainers and teachers creating effective and motivating eLearning courses can be stressful and require skills, time and resources that aren't there. Course templates have proven to be a way to reduce costs and resources. Using a template to create a course gives teachers and trainers the opportunity to develop motivating and engaging content for learners. (Gutierrez 2012.)

Time and effort put in designing an eLearning course well is beneficial to both the learners and the teachers. Even though teachers and trainers want to have a certain level of autonomy over developing their courses, standardization across courses can be helpful and give the course creators time to develop the content of the course and facilitate learning on the course. For the learners, standardization decreases the amount of time and effort that students need to put in to learning the course structure and frees up time for the most important thing; learning the course material. Having consistency in the structure of the courses and navigation in the learning environment is a key factor in effective online teaching and learning. (Onodipe, Ayadi & Marquez 2016, 2.) It is important to consider cognitive continuity and the learner's cognitive load when designing a course. Too much digital stimuli on a course can result in a cognitive burnout where the learner can't take in any new information. A well-structured course template can help teachers and trainers in creating course content that will make the learning experience structured and consistent for the learner. (Fresen, Hill & Geng, 2014, 1.)

One of the main benefits of using a predesigned course template is providing the course creators an easy to use mechanism to switch from traditional face to face teaching to teaching online. A template can also provide consistency and a "best practices" way to deliver and design courses at the same time lowering costs and

resources used for creating eLearning. (Bachman & Stewart 2011, 180.) A well-designed course template includes a map of possible ways to use technology in teaching and learning as well as guidelines to the decisions and different steps needed to implement technology. (Jara & Mohamad 2007, 1.)

As stated in previous chapters, not everyone who is interested in creating online courses or finds themselves in a situation where creating an online course is the only way to teach your content, has experience and knowledge in learning design. Design thinking and projectifying course creation are most likely not familiar starting points to all subject matter experts and pedagogy might not be the first thing on the checklist. If the LMS that is used for online teaching or training includes a template that takes all these aspects into account, subject matter experts as well as teachers and trainers alike, can focus on the content without having to worry about pedagogy and design or visualization of the course.

3 METHODOLOGY

3.1 Qualitative research

This research was conducted using qualitative research methods. The basic characteristics of qualitative research are to ask research questions in search of meaning and to look for useful ways to discuss experiences within a specific context. Different words and concept have literal meanings, but they also have implicit interpretations. In a qualitative research the variety of these interpretations found in the literal meaning of concepts is embraced. (Brennen, 2013, 15.) In qualitative research data is collected by the researcher often through examining documents, observing behavior or interviewing participants (table 1). In a qualitative research the researcher can be described as the key instrument. (Creswell & Creswell, 2018, 257.) However, the aim is not to describe the researcher's opinion but to rather focus on the meaning the participants hold about the issue of the research. Describing the observations is not enough. They must be placed in the relevant cultural, historical, political or economic contexts. (Brennen, 2013, 22.)

TABLE 1. Qualitative research methods.

Methods, Data collection	Emerging methods
	Open-ended questions
	Interview data, observation data, document data, audiovisual data
Analysis	Text and image analysis
Interpretation	Themes, patterns interpretation
Researcher	Positions him- or herself Collects participants meanings Focuses on a single phenomenon Validates the accuracy of findings Makes interpretations of the data

Brennen (2013) states that research is influenced by distinct paradigms such as Positivism, Post-Positivism, Critical theories and Constructivism. Each paradigm provides values and principles that guide research strategies and activities. According to Creswell & Creswell (2018, 44) philosophical ideas, though largely hidden in research, influence the practice of research and therefore should be identified. For this research the paradigm that fits the closest is constructivism. The research process was inductive where the goal was to generate meaning from data collected from the field as well as from previous research. For constructivist research the aim is to see the complexity in different views rather than categorizing ideas in a narrow way. As is the case in constructivist research, information was gathered personally, and the researchers own experience and background shaped the interpretation of the findings. (Creswell & Creswell. 2018, 46.)

Besides deciding on the method used, researchers must decide on the type of inquiry within the methods. The type of inquiry chosen is the research design. This research can be best seen as a case study. According to Ellinger and McWhorter (2016, 2) a “case study research is designed to explain, explore, or describe a phenomenon of interest”. Järvinen (2012, 74) states that a case study is an analysis of a unit that stresses developmental factors and that the result can be a model or a theory.

3.2 Data collection

The data used in this research were collected by a semi-structured interview with selected clients. All participants were given the same set of questions. An interview is a good method of acquiring data for research. In an interview, individuals have the opportunity to bring up their views on the subject in question freely. (Ojasalo, Moilanen & Ritalahti 2020, 59.) As Brennen (2013) says, using a semi-structured interview gave the chance to be flexible and use follow-up questions to go more in depth regarding some of the topic discussed. Järvinen (2012, 140-141) states that the type of interview conducted differs depending on the used research approach. In a constructive approach where the goal is to build an artifact, in this case a course template, both the interviewer and the interviewee

cross-educated one another to understand the opportunities and restrictions building and use of the artifact will present in the future.

For this research five organizations were selected by the commissioner. The organizations represent fields of higher education, healthcare, business, associations and broadcasting. All the organizations offer online education.

The interviews were recorded and later transcribed by the researcher. As at the time of the interviews Corona-virus prevented face-to-face interaction all interviews were held online. The interviewees consent for recording was asked and freely given in all cases with a promise that the organizations would not be identified in the final report. The interviews were conducted in Finnish and the transcripts of the interviews translated into English by the researcher.

The interview questions were designed to prompt a discussion with personal insights and perspectives on learning design, teaching online and the usability of predesigned course templates. As stated before, all interviewees were given the same core questions:

1. Are you using the basic course template currently offered and why?
2. Is there a preference for a course format in your organization and why?
3. Does the current course template offer enough guidance and why?
4. Is there anything missing in the current template?
5. Is there something in particular you feel a course template should entail to make it usable?

Follow-up questions were asked according to the answers given by the interviewees in order to get a more precise, in-depth description of each interviewee's thoughts and ideas behind their statements.

The tool to pave the way to analyzing the data collected via the interviews is transcription. The accuracy of the transcription depends on the project and the aim of the research. If the point of the interviews is to gauge the content of the answers, the transcription can be done less accurately. If, however the exact

words the interviewee uses are meaningful from the perspective of the research, the transcription is done word for word (Ojasalo, Moilanen & Ritalahti 2020, 60.) For this thesis approximately eight hours of interviews was transcribed word for word.

3.3 Data analysis

The transcribed interviews were analyzed following a thematic coding protocol. The analysis phase started with reading through the transcribed interviews several times. The aim was, as Caulfield (2020) says to “identify common themes – topics, ideas and patterns of meaning that come up repeatedly.”

Thematic analysis is a constructivist process that involves searching for and identifying common ‘themes’, threads or patterns that occur within the data. It is a flexible method that can provide the interpreter with a rich and nuanced account of complex data. When classifying by theme, the focus is on phenomena, topics and ideas that the interviewees have in common. The themes that rise from the analysis can be related to the themes of the actual interview or they may be surprising ideas which have occurred to the interviewees during the conversation with the interviewer (Ojasalo, Moilanen & Ritalahti 2020, 61-62.) There are different approaches to doing a thematic analysis; it can be inductive or deductive and it can have a semantic or latent approach. Whereas an inductive approach allows the data to determine the themes, with a deductive approach the researcher has some preconceived themes they expect to find based on previous knowledge or theory. Using a semantic approach only the clear content of the data is analyzed. On the other hand, a latent approach would involve the researcher reading into subtext or assumptions they might have on the data. (Caulfield 2020.) Because the theoretical framework of this research gave a fairly strong idea of the themes that could arise from the analysis, the approach was deductive in nature. Because only the clear content of the data was analyzed this research is semantic in nature.

According to Caulfield (2020) the most common form of thematic analysis that follows a six-step process was developed for psychology research by Virginia Braun and Victoria Clarke. Their six steps are:

1. Familiarization where the researcher strives to get a thorough overview of all the collected data. During this phase the interviews were transcribed and read through in order to get familiar with the content.
2. Coding which means highlighting sections of the transcriptions. During this phase recurring phrases, sentences and generally everything that seemed relevant were highlighted and labeled in order to describe the content. These labels are the codes that were combined into groups. The codes helped obtain an overview of the main points and meanings that came up throughout the data.
3. Generating themes where the codes were gone through in order to identify patterns that recur in the data. From these patterns themes that gave a broader meaning to codes were formed.
4. Reviewing themes to ensure that the themes formed in the previous stage were useful and represented the data accurately. The themes were compared against the data set to make sure nothing was overlooked or missing.
5. Defining and naming themes where every theme was given a name to describe the meaning to allow the understanding of the data. The themes were named concisely and in an understandable way.
6. The final stage is writing up the analysis of the data which will come to life in the next chapter.

4 RESEARCH RESULTS

4.1 Overview of the interviews

The organizations for the interviews were chosen by the commissioner. Each participant was contacted via email and phone to get personal consent for the interview. The participants were given the insurance that the organizations they represent as well as their person will not be identified in the final report.

As mentioned before the interviewees represent fields of higher education, healthcare, business, associations and broadcasting. The interviewees have a varying background and experience in teaching online spanning from beginner to experts in online course design, LMS manager and service design. All interviewees have a role in training and teaching in their respective organizations; training, coordinating, teaching, IT expert, manager.

Two of the organizations had a core team whose responsibility it is to design and create online courses using material that subject matter experts give them. The team members do not all have the same skillset regarding online course design.

“I have knowledge and skills in design and pedagogy. The others more in the technical aspect of making the courses. My feeling is, we will continue like this in the future. The subject matter experts will give us the material and we will make the courses. There is no point in everyone using their time in creating the courses.”

When asked about the learning design teams’ concept of how well subject matter experts know and understand pedagogy and learning design, both teams felt that not all do.

“I have to say, they don’t. This is a process that still needs work. At the moment, it is more like trial and error to find out what works and what doesn’t”.

They also felt that in order to make the course design process more efficient, it would be useful to have a readymade content that subject matter experts could familiarize themselves with before comprising material for courses.

“I feel some kind of micro content would be good. Every organization creates courses that look like them, but if the experts don’t have any idea what online pedagogy is or any vision in course design, it will be very difficult to transform a lecture into an online course. After all, they aren’t the same thing.”

Three of the organizations rely on the teachers and trainers to create the courses and offer support and guidance in the technical aspects of making the content. The subject matter experts in these organizations are mostly familiar with pedagogy and have experience in teaching or training. They feel the LMS should have examples that take different training methods into consideration.

“There should be different types of examples for different types of courses. More choices. It’s the teacher’s responsibility to take the learners into consideration. If they know how to do that. So, in a way that should be included there as well.”

Mediamaisteri offers a set of course templates with the installation of their LMS. This thesis aims to develop those templates in accordance to the need of the customers. Therefore, the first question about the actual course templates was to find out if the interviewed organizations used the templates when creating online courses and what their reasons for using or not using the templates were. None of the organizations used the current course templates as such or at all. The current templates were generally seen as “too bare”.

“Actually, we have modified the templates from yours. So, we’ve really made our own because those ones don’t really serve us and what we need.”

When asked what the interviewees felt were the benefits of having course templates the most common answers were that it makes creating courses easier and saves time.

“Well for me the biggest thing is saving time. If there are courses that have common content, like folders for materials and tasks, it really is a great advantage to have a template for these. I myself have dozens of courses so having that really does save time. Of course, it also helps ensure you don’t forget anything. With a template the course has all the elements and sections it’s supposed to.”

However, there were those who felt they were somewhat cynical toward the subject matter experts using the templates so that they would remove the sections and elements not needed. They feared that would result in a course that might be confusing to the learners.

“When we’re talking about big masses of content creators who might not find making online courses the most uplifting task and they’re doing them half forced, we have to be cynical. We know they won’t always notice things that have to be deleted. Then it will be extremely awkward for the learners when the course has texts like write teacher’s name here or name.name@... We’re learned that if the course template has those, they will be left there.”

The interviews focused on the interviewees perception on teaching online and creating online courses and utilizing readymade course templates in this context. The themes that came up from the interviews are: user experience, learning design and motivation and instruction. The themes will be discussed in more detail on the following chapters. The codes and themes that rose from the interviews can be seen below (table 2). Each chapter shows a table of the phrases that were extracted from the interview transcriptions and used to form the codes.

TABLE 2. Codes and themes.

Codes	Themes
• Learner centered	• User experience
• Visual	
• Easy to use	
• Pedagogy	• Learning design
• Instructional design	
• Activating students	
• Teaching course creation	• Motivation and instruction
• Encouragement	
• Teachers voice	

4.2 User experience

One of the main concerns for the interviewees seemed to be creating courses that are usable for the learners (table 3). The consensus was that online courses should always be clear and easy to navigate for the learners and that the learner should always have easy access to instructions on how the course will progress.

"It should be simple and easy to read for the learner. Easy for the learner to navigate. So that they'll know what's on the course."

The interviewees all agreed that visuality is an important aspect to take into count in the templates. Media elements are seen as an important factor when it comes to course content. During the interviews both the technical implementations and how the visual elements make the learner feel were mentioned. So visuality is seen as a way to evoke emotion with the learners and in that way help them connect with the course content.

"It would be useful for the templates to have examples of images and text as in what size images and where to focus them and also where the text should go. The visual side of course design and reasons for it. You can't be expected to just

know and understand those things. It would be important to guide the teacher on what to consider so that the course works on different screens."

"…and it would be important to guide the use of images. That the layout of the course should be intact and clean. Media elements are important, and they should be used correctly, and this is something that should be guided using examples. That you don't have to have a degree in graphic design to be able to get it right. People don't feel well if the elements don't make sense and are all over the place. They should visualize the content. A person feels good when they're taken into the right surroundings. If you're teaching about the woods, take them to the woods. Show them trees and a campfire."

To make it easier for those content creators that might not have as much experience in teaching online, the interviewees felt it would be important to have a template that guides them. The templates should include examples of texts and different elements that would be easy to edit to match their own content.

"It would be useful to have examples with explanations like you can try these out and you can get started with these and this is the reason the layout is like this. It would be like a study material on design for the teachers so to say."

TABLE 3. User experience phrases and codes.

Guidance for using so that learners will understand how a course is progressing	Student centered
Simple, easy to read for the learner so they'll know what's on the course	
Clear, easy to navigate on the course	
A clear and visual layout for learners. A visually pleasing model would be good.	Visual
The course creator should ensure a clear and visual layout on the course.	
It would be useful to guide how to use images on the course. It's important to have knowledge on how to use different media elements without having a degree in graphic design.	
Guiding texts and information would be useful.	Easy to use
It would be good to have examples with explanations…you can try these out and you can get started with these…study material for teachers so to say.	

4.3 Learning design

The discussions regarding content of the course templates prompted the interviewees to bring up aspects regarding pedagogy in teaching online (table 4). One of the interesting points that came up was the idea of a template that would help make a “brain friendly course”; a template that would help take into consideration how people learn.

“Maybe a compact guide, like pedagogy in a nutshell. As in don’t upload power points and write text that is too long. To show that a person needs versatility and modules and action. A guide to make functional content. In a nutshell a template that guides toward making a brain friendly and a human friendly course.”

When talking with the interviewees, listening to the recordings and going through the transcripts the researcher discovered, that although all interviewees felt the templates should have a pedagogical base, the way pedagogy was to be presented differed. The organizations that had a core team to create online courses wanted the template to have explanations and guidance on how to design a course with pedagogy in mind. On the other hand, the organizations that had mostly subject matter experts creating the courses wanted the templates to have examples that could be easily edited.

“Digital pedagogy and design. A layout that gives a general idea of what should go where.”

“There’s a need for a model course, a basic course. One that has forums for discussion, a possibility for peer assessment, different ways to add resources. Just the basics that teachers need. A readymade content from a pedagogical perspective. There could be a basic version for those who want quick and easy and an advanced version for those who really want to make an effort…that the template shows…hey you can do all kinds of things. That it doesn’t have to simple. A template that shows good practice. People want to see good practice but its time consuming and difficult to find.”

This was also seen when the interviewees brought up elements of learning design. All the interviewees felt that versatility is important and that the template should reflect that. For the organizations with a team for course design this meant the template giving clues and ideas on learning design; to make the course creator think about using different tools to create content. They also wanted the template to include help for writing a script for the course.

“It would be nice for the designers to get encouragement in versatility and activating learners and help for storyboarding the course. But not in a way that it constricts the thinking process. Instead gives an idea that this is something that you can do.”

“The template could include sort of teasers and examples that are built in the template. To make the course creator think about maybe using a drag and drop here and things like that.”

The organizations where subject matter experts created the courses wanted the template to have elements that could be either kept on the course or taken out. Instead of ideas and clues they felt the template should have actual activities.

“Maybe the template could be like a core course where a course creator can add elements or take elements out.”

“It should have examples of activities and not just text telling what to do, but actual activities to edit.”

Activating learners was an aspect that all interviewees mentioned multiple times. They all felt that a course template should have ways to keep learners active and stay onboard the courses.

“That if you think about the learner it needs to activate and motivate. That the learner would feel like they’re actually doing something and not just like…oh, a slide, I’ll read and then the next slide. People want work for their brain. They want action. So, the template should steer the course creator in a direction of something more than just reading.”

"It's important to know how to get the learners to stay onboard the course. It should have tips and tricks to help with that."

TABLE 4. Learning design phrases and codes

…there could be recommendations and" in a nutshell" guides on how to make a" brain friendly course"	Pedagogy
…pedagogy in a nutshell as in don't upload power points and write text that is too long…	
A readymade content from a pedagogical perspective	
Digital pedagogy and design, a general idea of what should go where.	
…Don't just tell how things are. Ask a question every once in a while. Like that.	
Maybe a core course where a course creator can add elements or take elements out.	Instructional Design
It would be nice to get encouragement in versatility and activating learners and storyboarding	
Teasers and examples that are built in the template. To make the course creator think about maybe using a drag and drop here and things like that.	
Examples of activities and not just text telling what to do, but actual activities.	
Not just quizzes but refreshing the learner's memory.	Activating students
It's important to know how to get the learners to stay onboard.	
People want work for their brain. They want action.	
To steer the course creator in a direction of something more than just reading.	

4.4 Motivation and instruction

Although traditionally course templates are thought of as a way to quickly and easily create content for online teaching, the interviews revealed a surprising wish from the interviewees. In addition to activating and motivating the learners the aspect of motivating and instructing the teachers and trainers came up. It was brought up that especially for beginners it would be useful to have a template that would teach course design (table 5).

"…and when you think about all the different activities and resources there…I don't even know how to use all of them. So, if you think about it from a beginners' point of view, it would be good to teach them that these work and you can get started with these. Again, different ways to bring content, good practices that might be difficult to find on your own."

"It would be nice to get tips like I could use that on my course. Different ways to create course content."

"For a beginner it would be useful if the template could teach course design. That would be really good."

Two of the interviewees brought up the need to encourage course creators to utilize different possibilities in course design. They felt that course creators might lack knowledge and skills when it comes to learning design and for that reason resort to familiar ways of teaching online. They felt the template should somehow tackle this problem. One even felt that course creators need to unlearn the old ways of doing things.

"We too have a lot of things to unlearn from the familiar and traditional way of training online."

According to most of the interviewees the template should make it easy to try new things and help encourage course creators to be creative in their teaching and training online.

"One thing I think is the problem is that they don't know how to make online courses. They don't what's on offer. They need something that guides them and encourages them to make versatile content. Something that would help think outside their boxes and encourage to try."

"…it would give ensurance and peace of mind to the teachers. That you can do this. If the template would provide tips and guidance even a beginner would have the courage to try."

Three of the organizations offer asynchronous online courses where the teacher or trainer is not actively in contact with the learners during the course. For two of those organizations the template should have a way to make the teacher's voice present even if the teacher isn't. They felt the template should have guidance on how to address the learner's in a way that they "hear the teacher's voice". The template should present ways to give guidance for the learners.

"…to kind of write the teacher in the course. That you're the one guiding them forward and you should be a presence on the course. That there would be an example of how to talk to the learners…hey, this is what you're getting into…where you give them guidance of the course and the learning process in a kind voice. In a way the teacher's voice should be there. At the moment it's like this is what's coming, and this is what you need. But I feel that when the learner is there alone, the teacher should be a little bit more visible. The template should have that kind of example not just a note to put information here."

TABLE 5. Motivation and instruction phrases and codes.

Different ways to bring content, good practices that might be difficult to find on your own.	Teaching course creation
Different ways to create course content.	
Editable examples and a guide to use them along with tips for course creation.	
It would be nice to get tips like I could use that on my course.	
For a beginner it would be useful if the template could teach course design. That would be really good.	
…it would give ensurance and peace of mind	Encouragement
If the template would provide tips and guidance even a beginner would have the courage to try	
Should have courage to use them and try	
Teacher's voice should be there	Teacher's voice
It would be good to have an example on how to talk to the learner. Like" Hi, this is what you're taking on…" In a nice tone open up the learning process on the course.	

5 DISCUSSION

The analysis of qualitative research is shaped by the theoretical framework in which the research is conducted (Creswell & Creswell 2018, 273). The analysis of the interviews in this thesis are compared to the theoretical framework of learning design.

5.1 Implications

Teachers and trainers must consider the use of different activities and resources when creating online courses. Having the use of partially structured course templates could help them with enriching their materials and creating activating courses for learners. (Hill et al 2012, 1.)

The interviews revealed features course templates should have in order for them to be as useful as possible. In general, course templates were seen as a useful tool in the production of online courses. In particular, saving time and resources were highlighted in the interviews. However, the templates currently available were not seen as useful as such. Instead, they had been used by organizations as a basis for creating their own templates. Therefore, from the customers point of view, developing the existing templates is necessary. However, it should be kept in mind that any course template should first and foremost be developed with attention to context and pedagogical practice. Furthermore, the templates should entail supporting instructions and examples of how they can be adapted to the purposes of teachers and trainers (Hill et al 2012, 1.)

One of the things that came up frequently in the interviews was, in one way or another, the concept of learning design. The interviewees didn't necessarily use the term learning design but the issues that came up fall under the concept of learning design. What is needed in the templates is for them to include pedagogy, design and learner activation. This requirement is fairly easy to comply with. A course template can be created with having a predesigned layout and examples of activities that can be edited to help create content that gives the learner tools to achieve the objectives of the course. An effective course is the result of using

a systematic model of design and development for careful planning and design. This design process has an impact on the quality of the end result and includes not only the layout but also the content and the activities that support the learning process. An online course is always an investment and takes time and knowledge to build. Since not everyone is an expert in learning design a functional course template can be the aid that is needed. (Hodges, Moore, Lockee, Trust & Bond 2020.)

Online courses and course templates should be designed for the learners. A course template should be easy to use as a tool to help the learner achieve the learning objectives that have been set. The interviews presented a need for the template to take into consideration the user experience; the template should be visual, easy to use and learner centered. For the learner the very first thing they will notice is how the course looks. Often when we say something is well designed, we refer to how something looks. A well-designed course pleases the learner's eye and, in this way, invites them in. It will give the learner the feeling that someone spent time and energy to create the course for them. (Bean 2014, 27.) Studies show that learners have expressed the need for consistency in approaches for facilitating learning online. Inconsistent way of delivering of content between courses, unclear instruction and use of activities can cause frustration. Therefore, a template that integrates pedagogy and learning design principles can promote positive learning experiences and environments for learners. (Griffits & Cook 2018, 1-6.) It is possible to technically create a template with a pattern of symmetry and with colours that work well together. It is also technically possible to create examples of activities with placeholders for images and instruction on how and when to use them. One way to ensure a good experience for the learner is to make navigation on the course easy by using modules and progress tracking. These are not complex elements by any means but do require the course creator to remember different settings that have to be set for the content. This too can be instructed on the template but, especially regarding progress tracking, cannot be automated.

The wish for the template to motivate course creators and instruct course design is challenging. On the other hand, the need for a template that can be easily edited to match the subject is needed and on the other hand organizations want

something that will help explain the process of course creation to subject matter experts. A template that can be easily and quickly edited cannot have too much instruction and text. This would make the editing process time consuming when the course creator goes through everything and deletes all the excess information from the course. A course template cannot be the medium to teach learning design as such. It can, however, give ideas.

The wish to have the teacher's voice on the course was a very interesting one. This also can be included in the template by giving examples on how to address the learners and introduce the teacher or trainer even if they are not present on the course real-time.

5.2 Ethical considerations

The interviewed organizations were chosen by the commissioning company and the goal was to get representation from many various fields of operation. The interviewees were first contacted by their contact person from Mediamaisteri to ask for willingness to participate. After this the researcher contacted everyone that had agreed to being interviewed via email (Appendix 1). The researcher had had previous contact with some of the interviewees, but this did not affect the outcome of the interviews. Having met some of the interviewees before made the conversations open and relaxed from the very beginning.

The interviewees or the organizations they represent were not identifiable from the analysed data. The recordings and transcripts were in the interviewer's possession without anyone else having access to them. The material of the interviews will be deleted, and no one will have a copy of them.

The previous research of experts has been honoured. All resources used in this report have been properly sited and referenced. The researcher has expertise in the field and has used this expertise in writing the report.

5.3 Recommendations for further studies

This thesis focused on the development of a course template used for asynchronous learning. As stated before, a synchronous course is very different in nature and therefore a separate template or templates should be developed for this type of courses.

The request for a template to teach learning design prompted the idea of designing an online course for learning design that could be offered to customers. As stated before, a course template cannot go into detail about the theory of learning design.

5.4 Conclusion

An effective online course comprises of learning design and pedagogy. Creating courses is a process that requires skills and knowledge along with time and resources. A course template is a tool for facilitating online learning. It can give an aspiring course creator a base for designing courses and in general help make the course design process resource-effective. It can be a quick and easy way of putting up a course or give the possibility to practice design with the end result baring little resemblance to the original template after being transformed to a functioning course. It will allow the teacher or trainer give it their personal flair all the while keeping the concept of learning design a part of the process of course creation. (Pappas 2021.)

The key to a learner's success in online learning is content and a pedagogically sound approach. Courses should and can be designed with the focus on learning. For those course creators that have pedagogical knowledge a predesigned course template allows them to focus on producing high-quality content without having to worry about design, and vice versa. Having access to a template that not only includes the design but also the pedagogy assists in prompting engaging, pedagogically sound courses that enable the learner to have a supportive and enhanced learning experience. These kinds of templates equip course creators with easily accessible learning design pedagogy. (Griffits & Cook 2018, 1-6.)

The aim of this thesis was to find out what course creators need in order for a template be of use to them. While not all of the interviewees used the exact terms that are included in the concepts of learning design and pedagogy, the ideas they bought up in the interviews fall under those particular terms (figure 6).

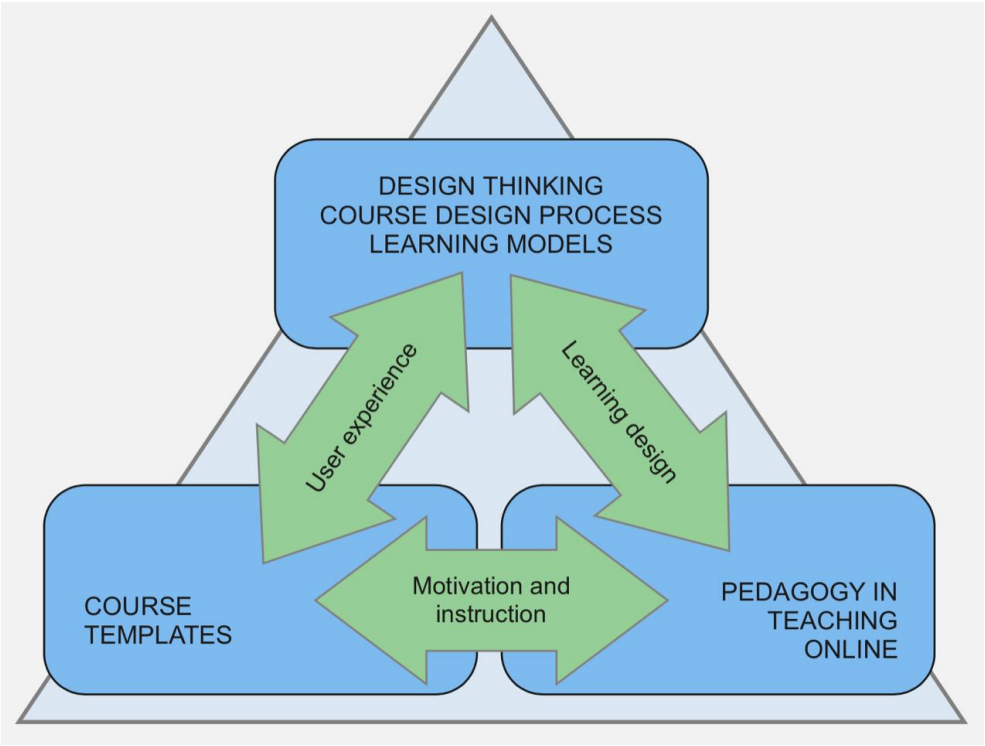

FIGURE 6. Ingredients of a course template.

A template should be one that has its foundation in the theory of learning design and pedagogy while taking into consideration the learner and the user's experience of the course.

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APPENDICES

Appendix 1. Message to the interviewees

Hello NN,

I am writing you regarding my thesis for my MBA (Educational Leadership) -studies.

As You heard before from NN the topic of my thesis is Predesigned Course Templates -Helping Organizations Teach Online. The aim is to develop the course templates that are offered in you LMS in accordance to your needs as customers and to offer a solution for the possible lack of skills in instructional design and digital pedagogy. I would appreciate your input in getting ideas for the development work.
The idea is to conduct an interview with selected clients. The agenda will be to discuss the current templates and wether or not you are using them, what kind of content you require the templates to have in order for them to be useable for you, in what way do you feel course templates can help in creating and planning online courses and anything and all that comes up during our conversation.

I would love to have the chance to hear your thoughts and ideas on this matter.

I will record the interviews and transcribe them. The organizations and the interviewees will be kept confidential and will not be identified from the final report.

Are you still willing to participate and what would be a good time for you?

Kind regards,

Mira Perämäki