

Co-Creating Autonomous Learning Solutions

Case: CORALL – Coaching-Based Online Resources for Autonomous Learning of LSP

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<p>The objective of this thesis was to participate in one co-creation Advisory Board workshop including planning the structure and methods of the workshop, help implement co-creation activities and analysing the co-creation workshop data. The purpose of the workshop was to find new creative solutions to promote autonomous learning of Higher education students and employees in companies and to identify which factors hinder or support autonomous learning. This thesis is made as a part of the Erasmus+ co-funded CORALL-project, whose aim is to carry out research on autonomous learning needs in global contexts, test and develop autonomous learning tools and online modules together with students and companies and provide support for coaches and supervisors in guiding the processes of autonomous learning.</p> <p>The theoretical framework is based on literature and research on autonomous learning, workplace learning, and co-creation as a research method. The most significant theoretical sources used are Holec's definition of autonomous learning (1979), Self-Determination Theory by Deci and Ryan (2017), and Tassinari's The Dynamic Model of Learner Autonomy (2012). In terms of workplace learning, the most significant theoretical framework is the advanced model of workplace learning by Illeris (2011).</p> <p>The study was conducted in the form of a co-creation workshop together with the Advisory Board members of the CORALL project in March 2020. The participants of the workshop were three world-of-work experts, one university student and two university experts. As the need for autonomous learning is a key working life competence, finding solutions for its development requires joint development efforts by students, educational experts, and world-of-work representatives.</p> <p>According to the findings, employees' autonomous learning skills and competences can be supported by tools that facilitate self-management and time management skills and by providing employees time to learn. Factors that hinder employee's autonomous learning are, for example, deficiencies in the employee's self-management skills, low level of work motivation, and shortcomings in the organizational feedback processes. According to the workshop participants, an autonomous learner's dream tools include visual tools that help align personal goals, team goals and strategic organizational goals. Such tools also help develop the overall learning culture of the whole organization.</p>	
Keywords Autonomous learning, workplace learning, self-directed learning, co-creation	

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1 Introduction

The working life is changing rapidly due to many factors such as digitalization, and because of that employees' workplace learning has become more important than earlier. The concept of autonomous learning is relevant in this context, as it refers to the ability to lead oneself as a learner. However, we do not have a commonly agreed or academically verified definition of the concept of autonomous learning in working life context. (Savaspuro 2019, 25.) The Finnish Ministry of Employment and the Economy has also identified lifelong learning as an important focus area for the future labour market. Artificial intelligence is projected to change many job descriptions so radically that the need for employees to update their skills will increase significantly in the future. (Työ- ja elinkeinoministeriö 2018, 41.)

It is possible to identify a few main reasons why autonomy is hitting through in working life right now. First, the current global work environment is quite different from what it was a few decades ago. A centrally managed organization in which decisions proceed slowly and they are made by the management belongs to the old environment. In the future, new technologies will offer new opportunities that must be seized quickly if a company wants to stay competitive. Because of this, a company's ability to respond quickly to change and engage in an ongoing dialogue between employees and management will be a success factor. There will also be changes in work tasks, as machines will replace human work. The work that will remain is creative expertise and human interaction. Doing creative work requires intrinsic motivation, which in turn has been shown to improve through autonomy. In addition, the Internet and electronic forms of communication enable information flows without a managing supervisor. (Jarenko & Martela 2017, 18-25.)

Although the need for autonomy has rapidly entered workplaces, self-management competences, originally born in the culture of start-ups and game companies, have not been actively developed in more traditional companies. In many workplaces, it has not been discussed how to manage oneself. However, autonomous learning benefits both the employee and the employer. Autonomy motivates and engages the employee and makes him or her feel relevant to his or her work. With autonomy, the company saves costs and gets rid of unnecessary processes. To be successful in autonomy, employers must train their employees for new ways of thinking. This is a long-term process and employees should be supported in learning to take on a new role in making decisions about their own work. (Helsingin Sanomat 2019.) What is notable as well is that in many organizations, employees may expect that the employer will train them to be autonomous, because that is how training has been traditionally conceived. Both employers and employees are

facing an unknown situation and forced to figure out together how to handle it. (Mellanen & Mellanen 2020, 90.)

When it comes to autonomous learning as part of workplace learning, learning must become part of the employee's daily life. There has also been a lot of discussion about continuous learning or lifelong learning in the context of workplace learning. The need for continuous learning in working life has also been identified by the Finnish Government. According to a statement, a large-scale reform must be implemented to guarantee that Finns can develop their competences flexibly throughout their lives. Training in the workplace should be significantly easier than it is today. Taxation, social security, and various benefits to enable skills development should also be improved. The Finnish Government has already launched projects that respond to these challenges. (Opetus- ja kulttuuriministeriö 2018, 4; 14.)

This Master's Degree thesis is made as a part of an Erasmus+ co-funded project CORALL - Coaching-Based Online Resources for Autonomous Learning of LSP in which Haaga-Helia University of Applied Sciences is participating with partner five European partner universities. The aim of the CORALL-project is to carry out research on autonomous learning needs in global contexts, test and develop autonomous learning tools and online modules together with students and companies, and provide support for coaches and supervisors in guiding the processes of autonomous learning. (Haaga-Helia 2020.) The researcher participated in the project from autumn 2019 to summer 2020. Her role in project was to be involved in planning, observing, and analysing one co-creation Advisory Board workshop in March 2020. The participants of the co-creation workshop were Haaga-Helia's partner company representatives, students, and teachers.

There are both factors which support autonomous learning at workplaces and factors that prevent autonomous learning at workplaces. This thesis is focused on mapping out ways to support autonomous learning at universities and workplaces. The research is based on data collected in the co-creation Advisory Board workshop in March 2020 and on an extensive theoretical review about autonomous learning and workplace learning. There are many studies on autonomous learning in an educational context, although interest in autonomous learning in workplace contexts is increasing.

1.1 Objectives and research questions

The objective of this thesis was to participate in one co-creation Advisory Board workshop and the project steps were:

1. Planning the structure and methods of co-creation workshop

2. Observing the co-creation activities
3. Analysing and summarizing the co-creation workshop data

The purpose of the workshop was to find new creative solutions to promote autonomous learning of employees working in international marketing and communication. To gain a better understanding of the phenomenon, the workshop participants discussed which factors support or hinder autonomous learning in organizations. The research questions identified for the co-creation workshop were:

RQ1: What supports autonomous learning in international marketing and communication contexts?

RQ2: What are the biggest obstacles to autonomous learning on a personal and/or organizational level?

RQ3: What would be new creative solutions to improve autonomous learning?

The research questions were answered by using a community research method in the form of a co-creation workshop. The co-creation workshop was chosen as a method because of the desire to find new creative solutions to autonomous learning challenges from the point of view of students, teachers, and company experts. An essential part of planning and designing the co-creation workshop was to do research into autonomous learning theory. During the workshop, the participants also tested and discussed some autonomous learning tools.

1.2 The scope and structure of the thesis

This thesis examines one of the Autonomous Learning co-creation workshops related to the CORALL project at Haaga-Helia University of Applied Sciences. The project itself extends over a longer period of time and involves university students, university experts and company representatives in six European countries. The partners of the CORALL - project are:

- Budapest Business School, Hungary (coordinator)
- Haaga-Helia University of Applied Sciences, Finland
- Beuth University of Applied Sciences, Germany
- Polytechnic Institute of Guarda, Portugal
- University of Economics in Bratislava, Slovakia
- University of Chemistry and Technology in Prague, the Czech Republic

This thesis begins with an introduction to the topic. The second chapter provides an overview of the literature on autonomous learning. The aim was to use recent research to obtain an up-to-date understanding of the phenomenon. The second chapter defines the concept of autonomous learning and also discusses autonomous learning in the workplace. The chapter also presents an overview of factors that support or hinder autonomous learning as they have been identified in previous studies. The third chapter defines the concept of workplace learning and discussed what factors support and hinder learning in the workplace. Chapter four summarizes the theories presented in the previous chapters and summarizes the main points.

Chapter five focuses on the methods used in the research. In addition, the implementation of the study from the design stage to the analysis stage is described in detail. The results of the study are presented in Chapter six and the conclusions from the results in Chapter seven. At the end of the thesis, ideas for further research are presented and the reliability, validity of the work are assessed. Finally, the researcher evaluates her own learning during this thesis process.

The thesis project group includes the researcher Master student Linda Laasala, Senior Lecturer of Marketing and Communication Tarja Autio from Haaga-Helia, and Principal Lecturer in Marketing and Communication Tanja Vesala-Varttala, who is the Project Manager of the CORALL project at Haaga-Helia.

2 Autonomous learning

This chapter focuses on defining what is meant by the concept of autonomous learning as well as what kind of research on autonomous learning has been done in the education context and workplace context and what were the outcomes. It will be also be explained why autonomous learning is relevant in working life and what factors have been found to support autonomous learning and what challenges there are. The chapter also presents strategies to support autonomous learning. A dynamic model of autonomous learning by Tassinari (2012) is also presented.

2.1 The definition of autonomous learning and self-directed learning

An alternative concept commonly used for autonomous learning is self-directed learning. The concept of autonomous learning has been chosen to be used in this thesis, as it is more commonly used in the context of language learning, which in turn is strongly related to the learning needs arising in international business contexts. Both concepts have been used in the theory sources referred to in the present work and both concepts will be discussed in this report.

In the context of autonomous learning, learner autonomy means that the learner takes responsibility for one's own learning. However, this ability is not inborn and must be acquired in practice or by formal learning. Autonomous learning takes place when the learner is responsible for the learning-related decisions required. These decisions relate to, for example, setting learning objectives, defining learning content and progress, choosing the learning methods and techniques to be used, monitoring learning progress, and assessing learning outcomes. An autonomous learner is himself or herself able to make all learning related decisions in which he or she wants to be involved. This can be done with or without a teacher and with or without teaching aids. Thus, autonomous learning can be divided into supported and non-organized autonomous learning. (Holec 1979, 3-4.)

According to Norrena, autonomous learning is a broad concept with many interrelated sub-concepts. Autonomous learning can be viewed from different perspectives: the individual's ability to be an autonomous learner, autonomous learning skills, the environment that affects autonomous learning, or the goal, purpose and consequences of the activity. (Norrena 2019, 13-14.)

Norrena argues that there are three reasons why learning to be autonomous is important. Firstly, the most natural way for a person to learn is to do it informally, and this is how

learning usually happens. What matters is how informal learning can be guided by formal means. Previous research has shown that when a student develops one skill, other skills develop at the same time. Learning is also a continuous combination of internal and external regulation, which should be guided by the learner. However, every individual needs their community, and a person has an inherent need and motivation to interact with others. What we strive for ourselves, we usually do for others: we want to make an impact, to validate, or to show that we belong to something. A prerequisite for well-being is to build a bridge between oneself and others. Autonomy supports well-being, the purpose of which is the ability of individuals to influence their own lives. In addition, individual autonomy supports the learning community as well, as interaction is a central part of autonomy. A common goal ensures that everyone is moving in the same direction. It is also required that everyone is flexible about their own goals. The benefit for each individual is that the workload can be shared between several people. The best environment for autonomy is such that encourages and helps the individual to achieve their goals. (Norrena 2019, 30-35.)

Self-directed learning, another concept commonly used in this context, most broadly describes the process by which individuals, either alone or with the help of others, define their own learning goals, identify learning resources, select, and use appropriate learning strategies, and evaluate learning outcomes. It is noteworthy that self-directed learning usually takes place in conjunction with other supporters, such as teachers, mentors, or tutors. (Knowles 1975, 18.)

When talking about self-directed learning, studies often refer to Self-Determination Theory (SDT) by Edward Deci and Richard Ryan. The Self-Determination Theory concerns those social conditions that facilitate or prevent human flourishing. The theory examines how biological, social, and cultural conditions either enhance or impair a person's natural ability for psychological growth, engagement, and well-being both in general and in specific areas. The theory assumes that humans are inherently curious, physically active, and deeply social. Human tendencies include the inherent tendencies to explore, manipulate, and understand what is associated with intrinsic motivation and the tendency to actively adopt social norms and regulations through internalization or integration. According to Self-Determination Theory, these active tendencies are related to intrinsic motivation, internalization, and social interaction and are based on specific phenomenal satisfactions related to a sense of competence, autonomy, and intimacy. The fulfillment of these satisfactions is reflected in human success and serves as a measure of well-being and vitality. Moreover, in social situations where there is psychological support for these

satisfactions, people's curiosity, creativity, productivity, and compassion are strengthened. (Ryan & Deci 2017, 3-5.)

2.2 The dynamic model of learner autonomy

There are many models of autonomous learning and one is Tassinari's (2012) The Dynamic Model of Learner Autonomy. It has been chosen for this thesis, as it explains the complex structure of learner autonomy and takes into account all its essential aspects. The model is made from a language learning perspective but can be used in other contexts as well.

Learner autonomy includes several dimensions and components. The most important four components are presented in The Dynamic Model of Learner Autonomy. The first is the cognitive and metacognitive component, which includes cognitive and metacognitive information, awareness, and learner's beliefs. The second is the emotional and motivational component, which includes feelings, willingness, and motivation. The third is an action-oriented component that includes skills, learning behaviours, and decisions. The fourth is the social component, which includes learning and negotiating with others such as a teacher or colleague. It is essential that the learner can master these components and the balance between them in learning situations. The model summarizes these components in relation to student skills, choices, and the selection process, and presents their interrelationships. (Tassinari 2012, 28.)

The Dynamic Model of Autonomous Learning is represented as a sphere with smaller spheres inside that describe autonomous learning competencies, skills, and activities. These competencies, skills, and activities are presented as verbs to show their action-orientation as well as process-orientation. The model is both structurally and functionally dynamic. Structurally dynamic means that each component is related to each other and this is described in the model as arrows pointing in both directions between the different components. Functionally dynamic means that the learner can start from any component depending on their own needs and move between components as they wish. This way model also takes into account the complexity of autonomous learning. There is no hierarchy between the components except for managing my own learning, which is a component that brings together all the other components. (Tassinari 2012, 28-29.)

The autonomous learning components in The Dynamic Model of Autonomous Learning have three dimensions. The dimension of emotions and motivation includes components called dealing with my feelings and motivating myself. The cognitive and metacognitive dimension include the structuring of knowledge. And the action-oriented dimension

includes planning, choosing materials and methods, completing tasks, monitoring, evaluating, and managing my own learning. The social dimension is linked to all three of the dimensions and includes cooperating. In real life, all dimensions are closely related, but their separation in the model helps the user to understand and conceptualize the complex phenomenon in actual learning situations. (Tassinari 2012, 30.)

The model includes a group of descriptors which are specific statements about individual competencies, skills, and learning behaviours of learners. The statements are distinguished from each other and divided into macro and micro descriptors. Macro descriptors give the learner general descriptions to support the self-assessment process. Micro descriptors are more precise and help the learner to assess learning more specifically. The figure (Figure 1) below presents some of these statements and descriptors. The descriptors (totally 118) form a checklist covering the main areas of autonomous language learning and they are available on online. (Tassinari 2012, 30.)

The learning components of the Dynamic Model are described in more detail in Figure 1. In short, **Structuring knowledge** occurs in all autonomous learning stages and activities. **Dealing with my feelings** is involved because emotions play a significant role in autonomous learning, so it is important for the learner to identify the emotions that occur in learning and process them to make learning effective. **Motivating myself** is an important skill in autonomous learning and involves both motivating oneself at the beginning of the learning process but also re-motivating oneself along the way. **Planning** is an essential part of autonomous learning, because without it the learner will not be able to design a learning plan that meets his or her own needs. It is also important to be able to change the plan if it turns out to be inefficient. **Choosing materials and methods** is essential for autonomous learning, as it requires the selection of appropriate learning materials, methods, and strategies. **Completing tasks** includes arranging the learning environment, arranging the learning time, completing the tasks, and using appropriate strategies and methods. **Monitoring** helps one to identify one's own weaknesses and strengths in learning and to structure one's own learning. **Evaluating** is at the core of autonomous learning, and it covers both the assessment of one's own progress and the assessment of one's own learning process. **Managing my own learning** is connected with all aspects of the learning process and summarizes the important stages and steps in other areas. (Freie Universität Berlin 2020b.)

Learner component	Dimension	Macro level statement example	Mico level statement example
Structuring knowledge	Cognitive and metacognitive	I can set myself a goal	No micro level statement
Structuring knowledge	Cognitive and metacognitive	I can plan a time and place for my learning	No micro level statement
Structuring knowledge	Cognitive and metacognitive	I can choose different methods and strategies	No micro level statement
Dealing with my feelings	Emotions and motivation	I can control my feelings when I am learning	I am aware of my feelings when learning and/or can reflect on them.
Dealing with my feelings	Emotions and motivation	I can control my feelings when I am learning	I can talk about my feelings when necessary (for example, with a fellow student or with a learning advisor)
Dealing with my feelings	Emotions and motivation	I can control my feelings when I am learning	I can control negative feelings when I am learning and can sometimes turn them into something positive
Motivating myself	Emotions and motivation	I want to organise my own learning autonomously	No micro level statement
Motivating myself	Emotions and motivation	I can motivate myself in a way that works for me	I am aware of my motivation for learning and can reflect on this
Motivating myself	Emotions and motivation	I can motivate myself in a way that works for me	I can remotivate myself when I notice that my initial motivation is wearing thin
Planning	Action-oriented	I can put together a learning plan	I can put together a learning plan in order to achieve my goal on my own
Planning	Action-oriented	I can put together a learning plan	I can put together a learning plan in order to achieve my goal together with others
Planning	Action-oriented	I can put together a learning plan	I can put together a learning plan in order to achieve my goal for an entire programme of learning
Choosing materials and methods	Action-oriented	I can choose materials and resources	I can choose materials to help me achieve my goal bearing in mind my language competencies
Choosing materials and methods	Action-oriented	I can choose materials and resources	I can choose materials to help me achieve my goal bearing in mind my learning style
Choosing materials and methods	Action-oriented	I can choose materials and resources	I can choose materials and resources to help me achieve my goal for a task
Completing tasks	Action-oriented	I can structure my learning independently	I can work alone (for example, to complete a given task)
Completing tasks	Action-oriented	I can structure my learning independently	I can complete individual tasks that I set myself
Completing tasks	Action-oriented	I can structure my learning independently	I can complete several connected tasks in order to achieve my goal. For example, to prepare for an interview I can
Monitoring	Action-oriented	I can recognise what prevents me from completing a task	I can recognise when a language deficit prevents me from completing a task (for example, I can't tell someone about my degree course because I am lacking appropriate vocabulary)
Monitoring	Action-oriented	I can recognise what prevents me from completing a task	I can recognise whether I have chosen the right steps to complete a task (for example, whether I should take notes while reading a text in order to produce a short summary)
Monitoring	Action-oriented	I can recognise what prevents me from completing a task	I can recognise whether certain feelings hinder me from (effectively) completing a task (for example, boredom, fear of speaking in front of others, or emotional blocks)
Evaluating	Action-oriented	I can evaluate my own language competencies	I can evaluate my progress on my own
Evaluating	Action-oriented	I can evaluate my own language competencies	I can evaluate my progress together with others
Evaluating	Action-oriented	I can evaluate my own language competencies	I can evaluate my progress with a learning advisor
Managing my own learning	Action-oriented	I can structure my learning independently	I can structure my learning and in particular: set goals
Managing my own learning	Action-oriented	I can structure my learning independently	I can structure my learning and in particular: set a time and place for learning
Managing my own learning	Action-oriented	I can structure my learning independently	I can structure my learning and in particular: choose materials and resources

Figure 1. Micro and macro level statements of The Dynamic Model of Autonomous Learning (Freie Universität Berlin 2020b)

2.2.1 Examples of autonomous learning tools

This chapter introduces two specific tools to support learner's autonomous learning. Tassinari's the Dynamic Model of Learner Autonomy (Tassinari 2012) presented in the previous chapter is a similar tool, but it was described separately as it takes into account all the dimensions of autonomous learning and provides a comprehensive model. The tools presented in this chapter provide concrete examples of autonomous learning support materials used for more specific purposes. These tools are also tested and discussed in the empirical part of this master thesis.

The Goal-setting pyramid (Figure 2) can be used when an individual wants to reflect on her/his dreams or goals and build a plan for their realization. It can be used either for a person's own purposes or as an aid when advising another. (Freie Universität Berlin 2020a.)

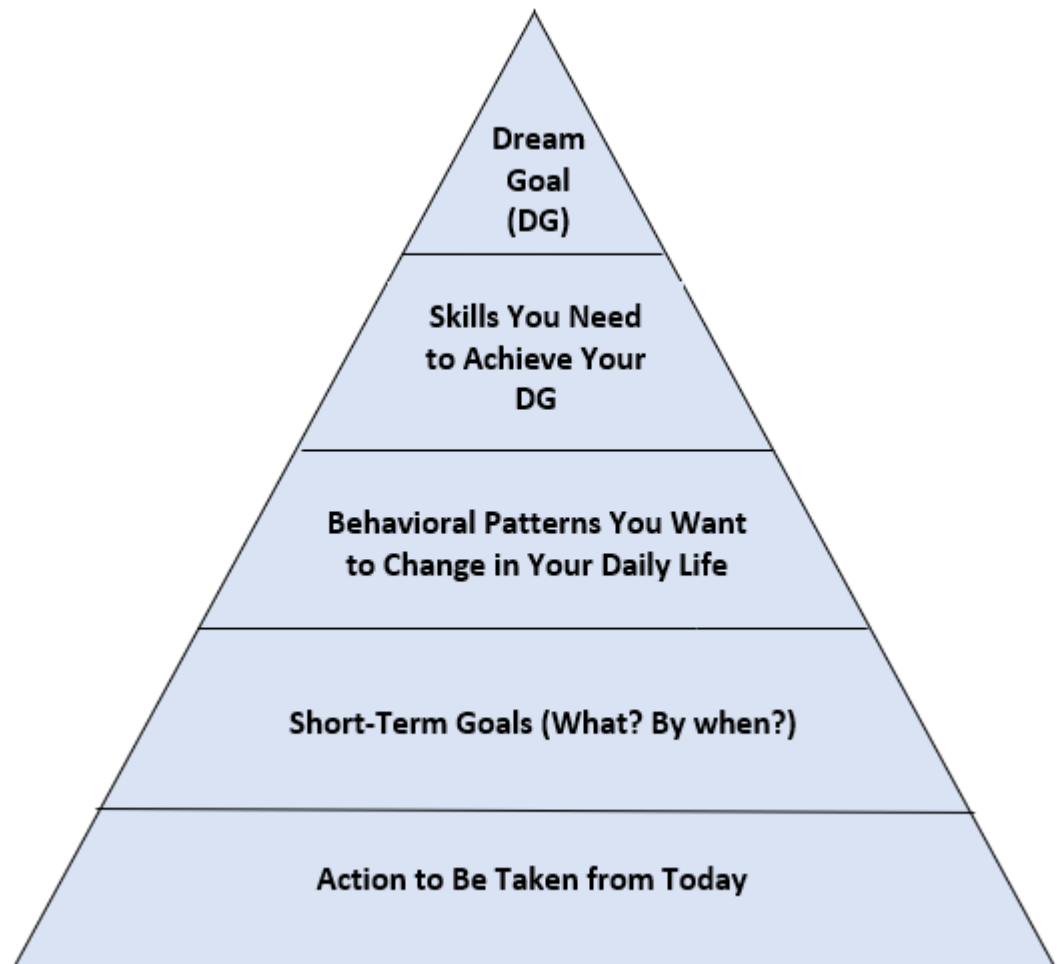


Figure 2. The Goal-Setting Pyramid (Freie Universität Berlin 2020a)

A tool that can be used to support collaborative autonomous learning is Team Canvas, which can be used to help team members build their collaboration in a visual way, find out their shared goals and motivations, and become more productive and cohesive as a team. The team canvas invites the team members to consider the following together:

- **Goals** for the team and for individuals
- Shared core **values**
- **Roles** and **skills** which each team member brings on the table
- Agreed **rules** and **activities** such as team communication practices
- Team **purpose**

The team canvas provides clarity for team work and helps prevent conflicts within the team. It also helps team building and the development of team culture in the long run. (Team Canvas 2015.)

2.3 Supporting autonomous learning

Factors supporting autonomous learning have been studied extensively in educational contexts and especially from the foreign language learning point of view. However, the results of these studies are also applicable to other learning contexts and environments. This subchapter discussed factors that have been found to support autonomous learning.

Abdelrazeq examined the levels of students' autonomous learning as well as the impact of teachers on students' autonomous learning from a student perspective. The results of his study were analyzed by using the autonomous learning activities of Tassinari's dynamic model of learner autonomy discussed in 2.1. (Abdelrazeq 2018, 726; 730.) According to Abdelrazeq, students rely on the following to support their learner autonomy:

- **Self-motivation** by using interesting learning material, writing about interesting subjects, learning with other students, and simply loving the language.
- **Controlling one's feelings** by using strategies to control negative feelings, such as talking to parents or teachers about how they feel, their achievement and the challenges.
- **Recognizing one's own needs and setting goals** by identifying ways to evaluate own learning such as using checklists and rubrics to assess needs and improvements. When setting goals, these are considered: language skills and needs, learning competences and preferences, learning styles, needed materials, and the time and place of learning.
- **Choosing materials and methods** such as novels, websites, magazines, books and communicating with native speakers. When choosing materials, own needs and goals are considered.
- **Tasks completion** by organizing their time to design and complete tasks. Students design and complete tasks based on their own needs and skills.
- **Reflection** by considering on their strengths and weakness.
- **Self-Evaluation** by assessing their competencies and progress.
- **Co-operating** by learning with and from others. (Abdelrazeq 2018, 731-733.)

Some of the participants of the Abdelrazeq's study thought that it is not teachers' responsibility to assist students to be autonomous learners. Some think that teachers are encouraging them to become more creative. Most think that the biggest obstacle is their own motivation and teachers cannot help with it. Many claimed also that teachers are lecturing too much and treat students as passive listeners, and they wished this would change. Participants would like that teachers start to train them to look information and they would like to start to analyze issues from their own point of view. (Abdelrazeq 2018, 733-734.) It was also found in this study that teachers should make students aware of autonomous activities with which to improve their learning. It is useful to hold training sessions about how to perform various autonomous activities. Teachers need to include autonomous learning strategies and activities in their lessons to improve students' autonomous learning. Individual instructions and using learner-centered teaching strategies will contribute to training students to be autonomous and develop their learner autonomy. (Abdelrazeq 2018, 736-737.)

Öztürk (2019) investigated how the course of autonomous learning affected the level of autonomy of learners and what aspects the course contributed to learner autonomy. The aim of the course was to train students to be autonomous learners who are aware of their own weaknesses and strengths as learners and are able to manage their learning process with the help of learning skills and strategies. The course included, for example, the following topics: reflective learning, learning styles and strategies, motivation, time management and critical thinking. Topics were covered through various methods during the course such as lectures, assignments, reflective writings, and presentations. (Öztürk 2019, 303.)

According to the Öztürk's research results, the level of autonomous learning of the subjects increased from the beginning to the end of the course. In contrast, no major changes in their learning habits were observed. The course particularly affected these areas of autonomous learning: self-awareness, managing one's own learning, and changing perspectives towards learning. Students became more aware of their own strengths and weaknesses as well as their learning styles, received tips on how to become a better learner, and became more aware of their own opportunities and learning styles. The course also helped students to set goals for their learning, critically review their own performance during the course, and evaluate their own performance. Students also understood how important it is to observe their own doing and take charge of own learning. (Öztürk 2019, 306-310.)

According to Jooneghani & Masouleh, to help students to be autonomous learners, it is important that teachers help students to become aware of their own learning and help them identify the strategies that they already use or could use. Students do not consider themselves as sufficiently autonomous, are unwilling to take responsibility and see the teacher as a dominant figure, who makes decisions in a classroom. Students need teachers' support so that they can become more autonomous. The teacher's role is to move students towards autonomous learning by respecting students' ideas, sharing the decision-making power in teaching, supporting goal setting, and leading students to take responsibility for their own learning. (Jooneghani & Masouleh, 2012, 840-841.)

Autonomous learning has been studied also in virtual learning environments. Lee investigated the effectiveness of task-based instruction mediated by digital tools, using data collected from two online language courses. Pedagogical choices were made to promote active, independent, and interactive learning. (Lee 2016, 81-82.) Most students agreed that task-based instruction helped them in effective language learning as well as in learning about the target culture. A user friendly and easy-to-use Course wiki, created by the teacher, was seen as a very useful tool, because it helped students to learn on their own. Weekly calendars were regarded as useful because they helped students to make plans. For some students, however, making plans was difficult due to their lack of self-determination and self-regulation. According to Lee, self-regulation is very important in online courses and it might be useful to teach self-management and self-monitoring strategies for students of online courses to increase learner autonomy. Course materials were seen as motivating and they encouraged students to learn on their own initiative. Feedback from the teacher was appreciated and it enabled students to make corrections and monitor their own learning process. However, some students had difficulties during the course, especially with time management. They were not prepared for autonomous learning. This proves that to become autonomous, students' self-management skills should be developed. In addition, real-time interaction was seen as very important, since it enabled students to ask questions as if they were in a face-to-face classroom. Tasks where students were able to use their own experiences and share them with others were seen as very motivating. (Lee 2016, 87-90.)

As we can see, previous research has shown that the learner needs support for autonomous learning. For example, supporting students in managing their own learning, goal setting, self-assessment and self-awareness helps them become autonomous learners. In autonomous learning, learner motivation plays an important role. To keep up motivation, the learner needs to succeed in self-regulation. Studies have shown that

strengthening learners' self-regulation skills can support autonomous learning. Self-regulation strategies are discussed in the next subchapter.

2.3.1 Self-regulation during autonomous learning

Studies have found that the learner's self-regulation has an impact on autonomous learning and that self-regulatory strategies can support autonomous learning. Csizér & Kormos (2014) studied the relationship between motivational orientation, future self-guides, intended learning effort, self-regulatory strategies, and autonomous learning behaviors among English learners in Hungary (Csizér & Kormos 2014, 276). Their study showed that students' learning goals, instrumental orientation, and positive self-related beliefs are prerequisites for the successful use of self-regulation strategies. They also found that effective self-regulatory strategies play a big role in influencing how students use learning resources independently to improve their skills. They concluded that motivational factors have an effect on autonomous learning behavior through the mediation of self-regulation strategies. (Csizér & Kormos 2014, 291.) They also pointed out that many learners need guidance how to choose and use self-regulatory strategies to help their language learning processes (Csizér & Kormos 2014, 294).

One example of self-regulatory strategies to support autonomous learning has been presented by Bell (2017). He focused on implementing self-regulatory strategies in the workplace. He divided self-regulatory strategies into three different areas: the first is prompting strategies, the second is guiding strategies and the third is cultivating strategies. (Bell 2017, 6.)

Prompting strategies encourage learners to observe their own learning and reflect their own learning process by asking questions. Questions relate to self-regulatory activities, for example, by initiating a process towards a goal or enacting an effective learning strategy. By answering these questions, learners notice possible shortcomings and can take steps to the right direction to enhance their learning. Since studies have shown that repeated exposure to prompts produces effects, this strategy may be more valuable in formal learning, which usually takes place over a longer period and allows the individual more opportunities to modify their own learning. (Bell 2017, 7; 10-11.)

Guiding Strategies increase learners' self-regulatory activity by providing the information they need to make effective decisions about how to draw attention to essential factors and focus their efforts. Adaptive guidance, for example, is designed to support self-assessment by providing learners with diagnostic information that helps them adjust progress and observe differences in performance. In addition, it seeks to influence

learners' actions and direct their attention by suggesting what they should do based on their past performance. For example, a person may be told that he or she has reached a minimum level of performance in one area but must learn and practice specific task elements to achieve control. A related strategy is metacognitive scaffolding, in which agents or templates are used to help students enact different aspects of self-regulated learning. Studies have found that learners who used this strategy were better able to regulate their learning. Guiding strategies can be an effective tool to support self-regulation before, during, and after autonomous learning experiences. However, future research is needed to better understand, for example, when each type of guidance should be used. (Bell 2017, 11-13; 15)

Cultivating strategies aim to develop learners' capacity to engage in self-regulated learning. With the help of these strategies, learners can learn how to better regulate their cognitive activities and often use self-questioning to monitor comprehension. Cultivation of strategies do not take place during learning. These strategies are implemented in a pre-training environment to prepare individuals to use self-regulated learning strategies during the following learning tasks. Metacognitive instruction has been researched to understand whether individuals can be taught to regulate their learning in complex autonomous learning environments. Metacognitive instruction aims to increase the frequency and accuracy of learners' assessments of their knowledge and help them make better decisions about allocating their time and effort. Usually, it informs learners of the importance of metacognition during learning, making them aware of common metacognitive errors and teaching them strategies they can use to enhance their metacognitive activity. For example, individuals may be taught to use self-questioning to improve the accuracy of their planning, monitoring, and evaluation activities. (Bell 2017, 15-16.)

2.4 Autonomous learning in working life

Autonomous learning is not a new phenomenon in itself, but its importance has been clearly understood in working life in the past few years. In this chapter autonomous learning will be discussed in a workplace context and the main factors behind its recent popularity will be introduced. The challenges of autonomous learning in working life and how those challenges can be overcome are also outlined. In addition, the impact and importance of organizational issues on employees' autonomous learning will be considered.

Learning at work is not a new phenomenon, but in the future, attention is shifting onto how to employees are developing their skills outside formal trainings. One estimate is that

informal learning covers up to 75 percent of learning within an organization. The use of technology-based methods in learning is growing and they give employees great control over what and when they learn. There are many autonomous learning opportunities, such as online courses, informal learning, communities of practice and social media, that individuals may use, but we know little about individual differences and contextual factors that influence the success of autonomous learning and how to evaluate its effectiveness. Research has shown that self-regulation is important in formal learning, but it is predicted to be even more important when learners take complete charge of their learning. Manager support has a major influence on employees' motivation to learn and participate in development activities, but we know little about how work characteristics can support or prevent autonomous learning outside of classroom. Autonomous learning at workplace is voluntary, meaning it is not required or imposed by an organization's formal human resource development policies and practices. However, organizational culture or values may support autonomous learning. In the context of autonomous learning, employees are not learning in order to meet pre-planned learning objectives and there are no prescribed specifications for learning content or process. As a result, employees should acquire knowledge that is relevant to their careers. (Ellingson & Noe 2017, 2-3.)

There are three main reasons why learner autonomy is such a significant factor in the corporate world nowadays. The first reason is globalization. The business environment has become increasingly complex and the flow of information and automation has sped up. For a company to survive in a changing environment, it must be agile. Another reason is the change in the nature of work. Routine work tasks have been reduced and replaced by creative thinking and independent decision making. The third reason is the rapidly evolving technology, which allows for decentralized structures that would not stay together without the technology. (Jarenko & Martela 2017, 11.) Employees' expectations have also changed: they expect more freedom, trust, decision-making, autonomy, and good management from their employers. Companies are expected to be driven by culture and by putting people first. This is particularly pronounced in the attitudes of millennials and the Z generation. (Savaspuro 2019, 39.)

A company's ability to react rapidly to changes in its environment has become an increasingly important factor due to new technologies. The old-fashioned centralized business model does not work as before, as nowadays strategy needs to be put into practice directly. There is simply not enough time to first plan and then implement. Furthermore, employees' skills are needed for decision-making, meaning that decisions cannot be made only by top management. Strategy work thus becomes a dialogue between employees and management, which means that the strategy is created together

and implemented as new ideas emerge. Work that cannot be easily replaced by automation is creative work and human interaction. Routine work can be carried out even when you are in a bad mood, but creativity and problem solving require intrinsic motivation and a good mood. (Jarenko & Martela 2017, 19; 22-23.)

Autonomy is a trendy concept in leadership today and more and more organizations have included features of it into their leadership culture. However, the concept of autonomy is not clear in the business world. In many companies, the problem is still that responsibility is given to the employee, but power is not shared. This causes frustration because things should be taken forward, but employees have no decision-making power. Some employees also experience abandonment because they have not received support, as it is only assumed that the employee should be autonomous. In an autonomous organization, decisions should be made by those who have the most understanding of the issue and something to contribute to it, because this speeds up decision making, improves productivity, and the organization becomes more agile. The challenge is that there must be deep trust between people in the company. In addition to organizational structures, autonomy covers a variety of personal skills based on strong self-knowledge. These skills include, for example, self-reflection, goal-oriented self-development, work prioritization, self-motivation, perception of the whole, time management, and interaction between different networks. However, few employees have been given training to master these skills. (Mellanen & Mellanen 2020, 89-90.)

According to Lauri Pietinalho, these are the six main reasons why not all organizations strive for autonomy or why some fail to implement it:

1. Change is pending - Change is not completed, as it is not understood that changing one thing does not make a company autonomous. Employees are given more responsibility but not support.
2. Hierarchy creates security - People naturally like hierarchy. Change should not be made immediately and at once, as people need time to change their behavior.
3. Monitory culture - In an autonomous organization, someone tries to use power if the responsibility issues are left open.
4. Stupid risks and laziness - Increased power can lead to excessive risk-taking. On the other hand, some do not get anything done when there is no one commanding.
5. The bigger the team, the harder it is - It is challenging to implement autonomy in a large organization. In this case, hierarchy is needed on some level.

6. Lost purpose - An organizational model based on cooperation and trust will not work if employees experience a conflict of values or do not share a common goal. (Savaspuro 2019, 34-35.)

It is good to understand that it is more challenging for old hierarchical companies to be autonomous than it is for new startup companies. Modifying the existing organizational culture is difficult and the problem is often that many support structures have been removed in the name of autonomy. People are often expected to be autonomous, but it is not considered whether the existing organizational culture or organizational structure supports this. In addition, it is important to consider what strategic point the organization aims to achieve through autonomy. Exhaustion, stress, hurry, power struggles, work planning problems, inefficiency and laziness have also become challenges for autonomy. Organizations that have been successful in autonomy have already paid attention to it in recruitment. Efforts have been made to create an image for the employee candidate of what it is like to work in an autonomous organization, and the new employee has initially been offered support either from a supervisor or through coaching. (Mellanen & Mellanen 2020, 91-92.)

Internationalization creates its own challenges to organizational autonomy. First, differences in corporate cultures can be a challenge if another country has a very hierarchical corporate culture. When setting up an office in another country, it is important that people with the right values and mindset are being selected. It is important to be able to consider whether the applicant can change his or her action. Cultural ambassadors can be used as a bridge to the rest of the organization and engage in open discussion within the organization. They can also show an example how to work in a company. In difficult situations, discussions about backgrounds and expectations together can be used. (Syrjänen & Tolonen 2017, 218-219.)

To support autonomy in an organization, clear goals must be set for the organization and employees. Everyone needs to know where they are going and what needs to be done to get there. Everyone also needs to be aware of their responsibilities and what the responsibilities of others are. It is important that the employee has a clear understanding of their own role. Everyone must know who makes the decisions if disagreements arise. Psychological safety is important as well, meaning that mistakes can be made and problems can be discussed and solved. It is also important to increase self-understanding, which means an understanding of what a job is, what employees believe in, what their values are and how they are realized and what they aim for. (Savaspuro 2019, 48-49.)

Changes in future working life will require autonomous learning from the employee, but employees must be supported in it, for example, by offering training in autonomous learning skills such as self-reflection, goal-oriented self-development, self-motivation, time management and interaction. Employers also have a responsibility to consider what autonomous learning means to them, how the organizational structure and culture support it and how it benefits the implementation of the company strategy. It is good to remember that in an autonomous organization, an employee needs support from either a coach or a supervisor to avoid problems with employee well-being. Autonomy is implemented in different ways in companies of different sizes, as a certain hierarchy is needed in large companies. But it is very important for the realization of autonomy that everyone knows their own responsibilities as well as their common goals.

3 Workplace Learning

The second theoretical part of this thesis deals with workplace learning, as the empirical part of this thesis discusses views of corporate representatives on autonomous learning in the context of workplace learning. This chapter will explain the concept of workplace learning and what kind of forms it may take. There are different dimensions of workplace learning and two different ways of perceiving learning in the workplace are introduced at the beginning of the chapter. The advanced model of workplace learning by Illeris (2011), which describes the different dimensions of workplace learning and their interrelationships will be presented. Workplace learning can be formal or informal, and different forms of these will be addressed. Workplace learning can be supported in a variety of ways, which are explained in more detail in the second subchapter along with the impact of company management on learning. Workplace culture has a big impact on learning in the workplace and in the worst case, it can even prevent it. This is strongly in focus in the last subchapter, which deals with factors that hinder workplace learning.

3.1 The definition of workplace learning

When comparing learning in the workplace to learning otherwise, it is characterized by the fact that it takes place in a particular learning environment. However, it is worth mentioning that work-related learning may also take place outside the workplace itself, through courses or interactions with stakeholders for example. Learning environment means all the learning opportunities and materials available for learners. Social environment refers to the life of the individual and to a continuous learning process that is built on previous experiences and is given direction by future viewpoints. Learning takes place in the interaction of an individual employee and the learning environment. And because of this, learning in the workplace is an individual process just like any other kind of learning. (Illeris, K. 2011a, 29-30.)

Collin (2007) describes learning at work through three thematic observations. The first of the dimensions is learning by doing, which means that learning takes place when doing work. Thus, learning does not take place in specially organized conditions such as a course. This type of learning is characterized by the fact that it is difficult for the learner to express what she or he is learning, learning just happens. Another characteristic is that learning is linked to the work, which means that only those things are learned that are relevant to the work at the time. The second dimension is the importance of an employee's previous experience in on-the-work learning. This means that the employee applies what he or she has learned at work to his or her previous experience. Another aspect is that an employee's motives and goals affect what the employee learns or needs

to learn. (Collin 2007, 202-204.) The third dimension relates to the social aspect of learning at work. Work tasks and operating environments affect what an employee learns at work and what is possible to learn. Each employee as an individual defines and influences their own ways of working together with their closest colleagues. (Collin 2007, 206-207.) However, conflict situations at work cannot be avoided, and it may be instructive, especially for younger workers, to see what issues are causing disagreement in their own working group. Problem solving in working life is also often done together with, for example, colleagues. Problem-solving interpretation and structuring of situations, people, and circumstances are skills that are learned in interaction with others. (Collin 2007, 210.)

Goal-oriented employee learning in the workplace is usually informal learning where a co-worker, supervisor, or an outsider guides the employee. The guidance given by a colleague often takes place alongside the working day, which means that teaching is unplanned, but it can also be formal, for example when going through pre-agreed tasks for a new employee. Another common way to learn in the workplace is through various meetings and other more formal interactive situations. In these situations, however, learning is usually not the main goal, but it happens as part of employee interaction. The best way to promote learning in these types of situations is when the atmosphere is informal but focused, the interaction is friendly and has a clear goal, and all participants are given the opportunity to express their views. Meetings with a clear goal and arranged specifically for learning are often referred to as seminars, internal courses, or trainings. These types of learning situations can be beneficial for employees. They address topics that employees need to learn and that are relevant to their work, but at the same time, employees get to know each other, see each other from a different perspective, and benefit from each other's input. Today, however, many learning initiatives in the workplace are implemented in the form of various ICT-mediated learning opportunities. This type of learning is easy to implement when an individual employee or group has a need, but implementing it properly requires motivation and commitment from the learner. (Illeris, K. 2011a, 78-82.)

To sum up the definition of workplace learning, it can be said that learning takes place in the workplace all the time, either formally or informally, and the learning environment, the workplace, has an impact on the employee's learning. The upcoming chapters will explain in more detail the diversity of workplace learning, focusing on how workplace learning can be supported and what might hinder it, as well as how the organizational culture affects workplace learning.

3.1.1 The advanced model of workplace learning

Illeris has created a holistic model called the advanced model of workplace learning (Figure 3) that combines a model of workplace learning from a general perspective and a model of workplace learning from a workplace perspective (Illeris, K. 2011a., 42).

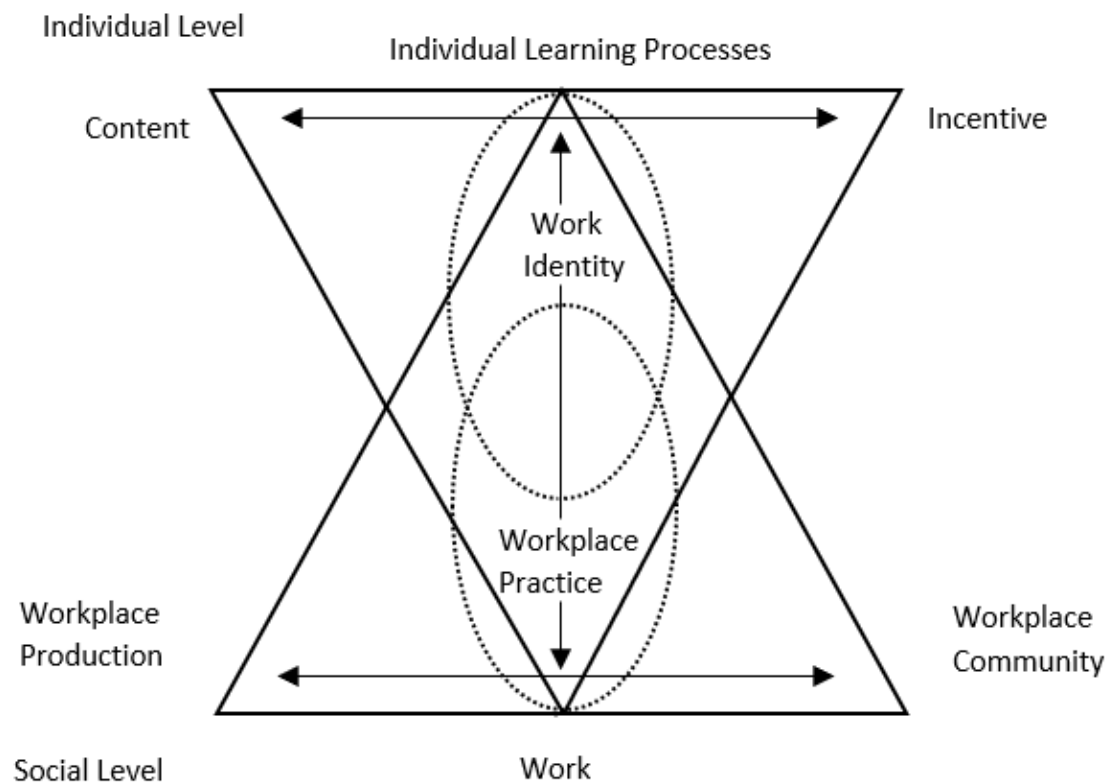


Figure 3. The advanced model of workplace learning (adapted from Illeris 2011a)

The model has two triangles placed on top of each other. The upside-down triangle depicts an individual's learning, and its starting point is at the individual level at the top of the model. The apex of the triangle is related to the interaction of learning and points towards the social level. The second triangle, right way around, describes the workplace as a learning environment and is based on the social level at the bottom of the model. The apex of the triangle points to an individual's learning opportunities. The model tries to both connect and separate these two dimensions, as in real life, these two dimensions interact. The decisive interaction takes place in the central part of the model, where the key elements of these two dimensions, work identity and work practice, meet. Learners' work identity is a combination of workplace learning potential and work practice and that

includes everything related to working life as a social and societal learning space. It is this place where important, adaptive, and changing learning can take place in the workplace. This means that the influence of the learning space is related to the work practice and filtered through the work identity of the learner before learning can actually take place. The learning space and work practice affect the learner's individual and shared perceptions and relationships of everything that happens in the workplace, which in turn affects the way in which the learning environment and workplace practices are developed. (Illeris, K. 2011a., 42-44.)

The area in the centre of the triangle where the two circles meet describes where learning acquires the distinctive feature of learning in the workplace. Learners' identities influence and develop community practices, and community practices help form an individual work identity. As can be seen in Figure 3, workplace learning can also take place outside the central common area. This type of learning is more common and less work-related. The practice and identity fields do not extend to the sides of the triangles, as workplace learning processes can take place so that they have little or no impact on learning. The content side of individual learning and the production side of the workplace learning environment are placed on the left side of the model, as workplace learning also has space for acquiring technical and practical knowledge that is not necessarily related to work practice. The incentive side of individual learning and the community side of the workplace learning environment, in turn, are placed on the right side of the model, as workplace learning has room for more general learning about personal, social, and cultural issues not directly related to the workplace or working life. (Illeris, K. 2011a, 44.)

3.2 Supporting learning at workplaces

When it comes to enabling and supporting employee learning in the workplace, the organization has a major effect. There must be time, place, resources, and support for employee learning, and company management must make these possible. An encouraging and supportive learning culture in the workplace is based on the management's appreciation for learning, but also on the employees' interest in developing their own skills. (Illeris, K. 2011a., 136-137.)

Employee learning in the workplace can be supported in different ways, and the most significant ways are methods that can be used for sparring and supporting an individual or a group. Such methods include guided learning, mentoring, coaching, and the use of superusers for example. In guided learning, a more experienced colleague guides the employee and their relationship with each other is equal. The instructor must be professional, but guiding is not supervised. Mentoring is closely related to guided learning,

as a more experienced mentor guides a less experienced employee. However, the difference is that it is not limited to the relationship between colleagues but can be a support function in the context of training. Coaching is about the coach supporting and encouraging the trainee in his or her development. The coach's job is to give advice without taking control and to support the trainee's self-esteem to get the best out of her or his expertise and competence. The term superuser, in turn, has emerged with the introduction of information and communication technologies. In a company, people can be called superusers of ICT tools. The superusers act as support to other employees in matters related to the use of these tools. It can also happen that superusers increase their role informally and act as support people for other users due to their own initiative and commitment. (Illeris, K. 2011a, 90; 92; 95.)

According to Högemark, companies should consider the needs of employees of different ages when planning training. It is also important to listen to the needs of employees and what they want to learn to be able to provide the right kinds of learning activity. One way to provide opportunities of professional development is through a rotation system: employees experiment with different job roles and thus gain a broader picture of the company. Högemark points out that mentoring programs are particularly useful, since they help employees with different skills connect at different stages in their careers. This way, staff members learn from each other. In reverse mentoring, on the other hand, older employees learn new skills from younger ones and the younger ones gain management experience. (Högemark 2018, 259-260.)

Parding & Berg-Jansson studied teachers' workplace learning focusing on what sort of learning teachers would prefer, what the conditions for learning at workplace are and how these two can be matched. According to the findings of Parding's and & Berg-Jansson's study, subject focus was the most desired and useful type of learning in both formal and informal learning contexts. Teachers would like to learn in everyday work, and spontaneous conversations with colleagues were seen as important. They wanted to have time and space to share ideas with colleagues and learn from each other without disruptions. The study also found that integrating learning outside of work into practical work was perceived as challenging, which is why the best way to learn was perceived to be learning together with colleagues in the work environment. (Parding & Berg-Jansson 2018, 113-115.) Based on Parding's and & Berg-Jansson's research, it can be concluded that learning related to the content of the work is seen as useful and meaningful and sparring with and learning together with colleagues at the workplace is perceived as an efficient way of workplace learning.

Tews, Michel & Noe, in turn, studied how having fun at work and the overall atmosphere affect workplace learning. According to the study, fun activities and manager support have a partly positive effect on informal learning at workplace. Fun activities were strongly related to informal learning, learning from others, and learning from non-interpersonal sources. Manager support for fun learning was strongly related to learning by oneself, but not significantly to overall informal learning, learning from others, or learning from non-interpersonal sources. (Tews, Michel & Noe 2017, 51-52.)

On-the-job learning has also been studied in connection with students' internships, in which co-operation between school and the workplace has played a major role. Onstenk researched on-the-job learning among vocational school students where the challenge was that learning at work takes place independently, not as part of school learning, so there was a lack of co-operation between the parties as well as lack of control over teaching. There had also been challenges in guaranteeing the quality of education for employer companies. The student is guided in the workplace by either a practical instructor, a practical work supervisor or a teacher. Learning in the workplace is social and the student is part of the work community, and for that reason coaches may play a big part in getting a student fit into the community and learn the corporate language. (Onstenk 2009, 193-195.) However, learning opportunities vary widely between on-the-job learners and workplaces. Many coaches have not been aware of what has been taught in school and many teachers, on the other hand, do not know enough about vocational practice. Many development projects have been made to improve the connection between school and the workplace. For example, a model has been developed in which learning takes place partly in the workplace and partly in school, and learning tasks are designed as part of real-life work tasks. Teachers play an active role, and they visit workplaces to discuss the progress of studies. Students can also bring their work assignments to school. (Onstenk 2009, 196-197.) According to Onstenk, it is essential to create more contacts between the workplace and the vocational schools. The educators should focus on structuring, supporting, and assessing communication between students, teachers, and workplaces. It needs to be clear what can be learned in a particular workplace, what the student would like to learn and how it fits into his/her studies, and what the learning results are. (Onstenk 2009, 198.)

As mentioned above, companies have several ways to support the workplace learning of their employees. It is especially important to give employees time and space to learn at work, as this can be easily forgotten in the hectic working life. Workplace learning does not have to take place in formal situations, and an effective way to organize learning is learning alongside work, for example through mentoring or coaching.

3.3 Obstacles of workplace learning

Learning at workplaces faces some challenges that are highlighted in this chapter. Primarily, workplaces are meant to produce services and goods, not learning. And while upgrading employees' skills would be beneficial to workplaces in the long run, the focus is usually only on achieving short-term goals. When learning takes place while doing work, the learner easily creates improvements in that specific situation, but the broader perception is left out. This has an impact on the application of learning in new situations and is related to a general understanding called competence. (Illeris 2011b, 34.)

In her study, Cacciattollo has highlighted a variety of workplace learning challenges. One of these is that information is not shared within the company, which means that the employee keeps the information to him/herself for one reason or another. An organization's policy can also impede learning in the workplace if learning is not part of the organizational culture. Employees might also hold back information from new employees, with the aim of harming them. It has also been found that if an employee does not trust their organization, they keep the skills and knowledge to themselves to secure their own position. (Cacciattolo 2015, 247.)

Parding's and Berg-Jansson's study also highlighted several factors that hinder workplace learning. According to their findings, learning opportunities vary depending on the employer and that puts employees in an unequal position. Some are offered interesting courses that deal with the core competences of their work, while some are only provided learning activities that deal with general issues such as IT skills. Even within the same workplace, employees can see the conditions for learning in a different light. Another challenge, especially in smaller organizations, may be to find a replacement so that the employee can participate in the training. The current work environment, which allows for interruptions and does not create a peaceful work environment where information could be shared with colleagues in peace, is also perceived as an obstacle for efficient workplace learning. (Parding & Berg-Jansson 2018, 113-114.)

A study by Tang & Choi examined teachers' experiences of continuing professional development in Hong Kong. The study revealed that competition between schools due to education reforms had led to more efficient work and thus affected the quality of work and thus job satisfaction and employee happiness. The problems were reflected, for example, in the pressure and alienation experienced by teachers. (Tang & Choi 2009, 13-14.)

Consuegra, Engels, & Struyven explored how new teachers experienced their school as a learning environment. The study found that opportunities for teachers to share their expertise with each other are informal, incidental, and rare. The challenges mentioned

were inconsistencies in work schedules, large workloads, and the culture of going home immediately after classes. Problems were also observed in the work culture. The teachers did not receive help even though they had asked for it and, in some cases, colleagues even gossiped about those who dared to admit they had a problem. It was also perceived as a problem that the daily reflection on learning remains superficial. There were also challenges associated with mentoring when the mentor was not available to the mentee when needed. (Consuegra, Engels, & Struyven 2014, 84.)

As noted above, the work culture has a major impact on workplace learning. The work culture must therefore support learning. There must also be time and peace for learning in the workplace, otherwise it will remain very superficial. It is also important that employees receive help when needed and can admit that they need help without being ridiculed.

4 Summary of the theoretical framework

Autonomous learning has been studied extensively in educational environments and especially from the perspective of language learning. Autonomous learning in working life is still a relatively unknown topic and has not yet been explored thoroughly. However, according to research, autonomous learning will become increasingly important in future working life, which means that employers must take it into account. The importance of self-management increases with autonomous learning, as the individual is responsible for his or her own learning. It has also been studied that autonomous learning is likely to succeed better if the learning environment supports autonomy. The importance of self-regulatory skills is also emphasized, and it has been pointed out that it is possible to learn both self-regulatory skills and self-management skills.

Most learning in working life takes place informally as part of the working day and autonomous learning has become increasingly important in a rapidly changing working life. Changes in working life are affected, for example, by the acceleration of digitalisation and the consequent changes in work tasks. The nature of work has changed from performing tasks to expert work. However, learning in working life has its challenges. Learning is a long-term process that takes time, and its results are not seen immediately. The rush of working life can also hinder learning, as sufficient time and peace should be set aside for learning. There are shortcomings in reflective learning in working life, as employees are not able to fully internalize what they have learned and thus are not able to use their learning in other situations in the future. There is a risk that their learning will remain superficial and the results of learning are not properly perceived or understood by the employee.

Autonomous learning is a hot topic in working life today, but studies show that employees are not very well prepared for it. Work tasks and organizational structures may have already changed so that employees are expected to learn on their own. Methods and tools that support autonomous learning tested in educational environments could also be applied to working life. Supervisors and coaches could adopt the same methods that teachers have already used and tested in educational settings to support students' autonomous learning. Human resources departments should also be actively involved in planning how to make the work environment as supportive of autonomous learning as possible.

Employees can be taught self-management skills as well as self-regulation strategies. Employee motivation is also of great importance for success in self-regulation and autonomous learning. The employee should have a clear goal to pursue and a clear

understanding of their area of responsibility. The employee should also receive support for autonomous learning, if needed, and the employee should not feel a sense of abandonment. It is essential to help employees get started in autonomous learning with a variety of tools and support structures.

5 Methodology and methods

The study of this thesis was carried out as part of the Erasmus+ funded CORALL - Coaching-Based Online Resources for Autonomous Learning of LSP. The purpose of the study was to gather experiences of autonomous learning from students, university experts and business representatives. This study was carried out as a case study to investigate a particular phenomenon, autonomous learning, in more detail. A qualitative research method, the communal ideation method, was used in the study. More precisely the research method used was a co-creation workshop the aim of which was to come up with new creative solutions together with stakeholders. Chapter 5.1 presents this study as part of the CORALL project and explains what the purpose of the CORALL project is and what it explores. Chapter 5.2 justifies the chosen research method, and chapter 5.3 presents the community ideation method as a research method and explains the co-creation concept. Chapter 5.4 describes in more detail how research method was used in this study and describes how the data collection and data analysis activities were performed. It also includes a detailed description of the implementation of the study.

5.1 The present study as a part of CORALL - Coaching-Based Online Resources for Autonomous Learning of LSP

This chapter explains the purpose of the study as part of the CORALL project. Haaga-Helia University of Applied Sciences together with five partner universities in Europe is participating in this Erasmus+-funded project, which aims to create autonomous learning tools for students and experts and supports supervisors and teachers in coaching autonomous learners in universities and workplaces. The rapidly changing international business environment requires that people take responsibility for constantly learning new things and sharing knowledge.

This study was carried out as part of the first output of the CORALL project. The first output included an extensive review of the literature on autonomous learning and workplace learning and interviews of higher education students, educational experts, and company representatives. At Haaga-Helia, the interviews included co-creation workshops with stakeholders. The author of the present thesis participated in the planning and implementation of one of these co-creation workshops. In addition, an extensive literature review of autonomous learning was conducted. The research questions of the first output of the CORALL project were:

1) What is the ideal conception of an autonomous learner/coach of autonomous learning in international business contexts?

- 2) What sort of international business challenges require autonomous learning?
- 3) What sort of support for autonomous learning is currently available (tools, materials, networks)?
- 4) What sort of personal or organizational obstacles to autonomous learning do learners and coaches face?
- 5) What sort of new autonomous learning solutions are needed to overcome learning obstacles and to improve learner autonomy in international business contexts?

The answers to these questions were sought in collaboration with students, university experts and business representatives, as the challenges of dealing with the rapidly changing business environment are shared by all parties and solving those challenges requires cooperation and joint development activities from universities and companies. (Vesala-Varttala 30.1.2020.) In total, 18 corporate partners, 24 educational experts and 48 higher education students were used as informants (Vesala-Varttala 2.9.2020.) The participants of the co-creation workshop at Haaga-Helia included three corporate representatives, two university experts, and one university student, all of whom had experience in international business. In addition the co-creation workshop had one CORALL project participant as facilitator, one CORALL project participant as an observer, and the author of the thesis as an analyst.

5.2 Case Study as a research methodology

This study was carried out as a case study since the case study is suitable as an approach to development work when it is desired to produce development proposals and development ideas. The object of research can be, for example, an activity, process, or service. The case study provides information about the phenomenon in its actual situation and operating environment. The aim of the case study is to produce in-depth and detailed information about the phenomenon under study. Case studies can be used to understand the object of development holistically in a realistic operating environment. The case study therefore aims to obtain as much information as possible about a narrow subject. (Moilanen, Ojasalo & Ritalahti 2015, 52.)

Development is always based on theories, methods, and previous research on the subject. By studying previous literature, one can compare one's own thoughts with the thoughts of others. It is essential to find in the existing literature what is relevant to your own work. The case study starts with the case under investigation in general. Anyone interested in the subject of development often already has some knowledge of the

phenomenon being studied, but often the subject must first be studied before knowing what can be asked about it or what the real development task is. Figure 4 illustrates the steps of the case study. (Moilanen & al. 2015, 53-54.)

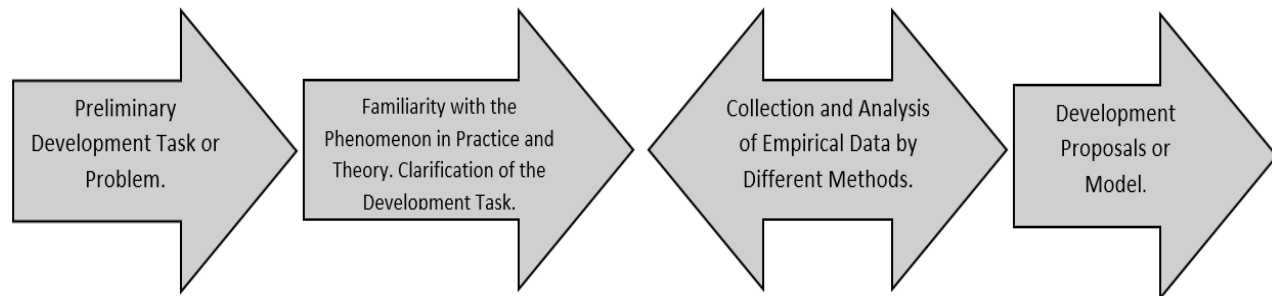


Figure 4. Steps of the case study (Moilanen & al. 2015, 54.)

5.3 Communal brainstorming methods

In this study, the communal brainstorming method was used as a research method. More specifically, it was a question of a co-creation workshop, which is one variation of the brainstorming method. The research method was suitable for this study because the aim of the workshop was to find new creative solutions together with different stakeholders. When the aim is to produce new perspectives, new ideas and new solutions for development projects, various creativity methods and creativity tools can be used (Moilanen & al. 2015, 158). Once the problem is identified, as many ideas as possible are produced. In creative problem solving, the main task of the participants is to generate as many ideas as possible. The quality of the ideas does not matter but the fact that there are a lot of ideas matters. This is to ensure that the best ideas are most likely to be found when many ideas are presented. Even wild ideas are important in creative problem solving. They allow participants to transcend the boundaries of wisdom and help participants think open-mindedly and make them notice something that would otherwise have gone unnoticed. With ideation methods, it is possible to produce solutions effectively in a short time. Short time means a maximum of 1-2 of hours, the duration depends on which method is used. (Harisalo 2011, 75-79.)

Brainstorming is suitable for situations where you want to produce ideas in a group. In the brainstorming session, a group of 6-12 people come up with new approaches or solutions to the problem led by the facilitator. The progress of the brainstorming session is presented in Figure 5. The objectives of the brainstorming are set and delineated in the initial phase. This is followed by a warm-up phase, which seeks to get rid of any previous beliefs or other limiting things. The third stage is the ideation stage, where everyone is

free to come up with ideas and there is no need to justify or evaluate ideas. This is followed by a selection phase, in which, for example, in turn, everyone can have their word. The facilitator of the group has an important role in the brainstorming, as his or her task is to take care of following the rules, the smoothness of the process and the rhythm of the ideation. (Moilanen & al. 2015, 160-162.)



Figure 5. Brainstorming process description (Moilanen & al. 2015, 161.)

5.3.1 Co-creation

Ramaswamy & Ozcan defined co-creation as follows: “joint creation and evolution of value with stake holding individuals, intensified and enacted through platforms of engagements, virtualized and emergent from ecosystems of capabilities, and actualized and embodied in domains of experiences, expanding wealth-welfare-wellbeing”. In co-creation, customers and stakeholders are the foundation of a company’s knowledge and skills, and together they create value. Co-creation is based on the idea that everyone has a say in creating value. Co-creation involves even those who are not directly involved in the process, with the aim of creating value together. Co-creation can take place internally within a company with employees as stakeholders, externally with suppliers or customers, for example, or between or within the public, private, and social sectors. (Ramaswamy & Ozcan 2014,14; 28-30.)

Typically, when it comes to value creation, a company has its own role and stakeholders have their own role. The company sees stakeholders in this context as a party that has an impact but does not actively participate in the process. When talking about co-creating, stakeholders are more actively involved in creating value. Stakeholders bring their own view as their own starting point to value creation. Stakeholders, whether external or internal, are an essential part of creating and defining value together with a company.

Individuated co-creation experiences are a core part of value creation in this context. (Ramaswamy & Ozcan 2014, 50-51.)

In the co-creation process, end users create solutions to a jointly identified problem based on their own experiences. However, end users are not professionals, so different methods and tools need to be used. In addition, co-creation requires an organization that invites the participants, facilitator (a person who coordinates the discussions), and an analyst to take care of the data collection, documentation, and implementation. (U4IoT 2017, 4-5.) One example of the tools to use is the 5 Whys technique, which helps to trace the root causes of problems. It has the idea of asking “Why” five times to find out the real cause of the problem. In this way, the participants are encouraged to really think about and analyze the problem. The 5 Whys technique also provides clarity to the problem, as it limits the focus to the essential rather than just saying a bunch of problems that could cause confusion. (MindTools.)

In this study, a facilitator was used in the implementation of the co-creation workshop. The facilitator was Haaga-Helia's project manager for the CORALL project, since a person who is familiar with the process should be chosen as the facilitator of the workshop. The person should also have a deeper understanding of the topic being discussed as well as the ability to lead participants. The facilitator explains to the participants what is expected of them and, if necessary, helps them with the creation through questions or examples. An important task for the facilitator is also to take care of the use of time and that each participant has a say. It is also necessary to have an assistant facilitator who takes care of practical matters such as the materials used and especially the data collection. He or she can also participate in the analysis of the data. The participants in the workshop are primarily selected from either stakeholders or end-users, who are selected in connection with the development topic under consideration. However, it is important to select participants who represent different areas of experience. It is also useful to prepare participants before the workshop so that it is easy to get started with the co-creation activities planned. Ideally, participants will be involved throughout the development project and then they can become ambassadors for the solutions developed. (U4IoT 2017, 7-8.) The stakeholders selected for this study represented different backgrounds and perspectives, which were: the company perspective, the student perspective, and the university teacher perspective. The challenge of developing autonomous learning is common and relevant to all three perspectives, so it was important to get the views of all parties on the issue.

5.4 Implementation of the study

This study was launched in December 2019, when the first project team meeting was held. The researcher started at that time as part of a project that involved this research with the task of designing, implementing, and analyzing co-creation workshops in the spring 2020. The original project plan can be seen in Figure 6.



Figure 6. Thesis project plan

The project team included researcher Master Student Linda Laasala, Senior Lecturer of Marketing Tarja Autio from Haaga-Helia and Tanja Vesala-Varttala, who is the project manager of the CORALL project at Haaga-Helia. Tarja Autio was also mentor of this thesis work. Figure 7 shows the risk analysis prepared by the researcher at the beginning of this thesis project. In final chapter of this thesis, the researcher evaluates how these were realized.



Figure 7. Thesis risk plan

5.4.1 The preparation of the study

At the first project meeting on 11 December 2019, the researcher got acquainted with the project and was informed about the first Advisory Board workshop held the previous autumn and its findings. The second part of the same Advisory Board workshop was planned to be held as the first co-creation workshop next spring and was also the first in which the researcher would participate in the role of researcher. The meeting discussed the configurations of the future workshops and the order in which they would be held. The researcher was given the task to get acquainted with previous research on autonomous learning and the co-creation method as a research method. The meeting also defined the work roles of the project team. It was decided that the workshops were facilitated by Tanja Vesala-Varttala, assisted by Tarja Autio and the researcher. The researcher was responsible for data collection during the workshop.

At the second meeting of the project group on 17 January 2020, the planning of a co-creation workshop started. The researcher was given the task to familiarize herself with the U4IoT Co-Creative Workshop method manual. The meeting decided that the

workshops will last a maximum of 2.5 hours based on the experience of one workshop held earlier. Based on previous good experience, it was decided to carry out the workshop with 2-3 themes to be covered and to use the post-it notes distributed to each participant to help with the planning. It was also decided that participants would be given a preparatory pre-assignment to save time in the workshop itself. The cross-cutting themes of the workshops were also noted: language & cultural differences, networks, cultural hierarchies, information retrieval & sharing, risk taking, and tools. A schedule for the workshop was also planned, which was completed by the researcher after the meeting. The schedule is shown in Figure 8. 15 minutes from the beginning of the workshop was set aside for a welcome and introduction. After this, in the section 2 topic was autonomous learning and the related challenges of international business. For this second section, participants were given a pre-assignment. The preliminary assignment was based on the results of one project Advisory Board workshop held earlier.

AUTONOMOUS LEARNING WORKSHOP		
1	Welcome to develop continuous learning!	15 min
2	Autonomous learning and the challenges of international business	30 min
3	Things that support autonomous learning	30 min
4	Things that hinder autonomous learning	30 min
5	New creative solutions for autonomous learner	30 min
Total creative work		2 h 15 min

Figure 8. Timetable of the Co-Creation workshop

In the previous workshop, five important characteristics of an autonomous learner had emerged. The participants were asked to reflect on those characteristics, which were:

- creates networks between cultures and actively develops their language skills
- passionately seeks new professional and cultural knowledge both proactively and as needed
- is not afraid to take on big challenges and is open-mindedly trying new solutions
- is an empathetic team player and actively shares his knowledge
- follows international trends and digital developments

Participants were also asked to list in advance which personal and / or organizational factors 1) support and 2) hinder autonomous learning. Participants were asked to list at least three of both and be prepared to write them down on post-it sheets in the workshop.

Figure 9 shows the schedule for the Advisory Board workshop. From the beginning of the workshop, 15 minutes were set aside for a welcome and introduction. This was followed by four 30-minute sections with different themes. The topics covered were 1. Issues that support autonomous learning, 2. Issues that hinder autonomous learning, 3. Testing and evaluation of tools, and 4. New creative solutions for autonomous learning. These themes were used to find answers to the research questions. It was also decided that the application of learning diaries both in higher education and in workplace contexts would be discussed in the workshop. In addition, it was decided that the 5 Whys technique would be used.

Continuous learning in Autonomous Learning		
SUPPORT AND OBSTACLES TO AUTONOMOUS LEARNING		
1	Welcome to develop continuous learning!	15 min
2	Things that support autonomous learning	30 min
3	Things that hinder autonomous learning	30 min
4	Tool testing and evaluation	30 min
5	New creative solutions for autonomous learner	30 min
Total creative work		2 h 15 min

Figure 9. Timetable of the Advisory Board Co-Creation workshop

The preliminary assignment for the workshop participants (appendix 1) was designed by the researcher together with the other workshop organizers. The aim of the preliminary task was to have participants reflect on the results of the previous co-creation meeting focused on important characteristics of an autonomous learner and international business

challenges that require autonomous learning. The international business challenges identified in the previous workshop were:

- Lack of knowledge of cultural differences and problems of language skills
- Lack of strategic networks and finding the right partners
- Strict cultural hierarchies and practices
- Utilizing data and digital information sources to gain customer understanding
- Accepting failures and learning from them

In the pre-assignment, participants were asked to reflect on what kind of personal and / or organizational factors 1) support and 2) hinder autonomous learning. At the third meeting, the researcher also planned the facilitators' schedule for the co-creation workshop based on joint discussion with the project team.

At the beginning of February, an internal kickoff meeting of the CORALL project was held among the Haaga-Helia project team. In this meeting, the tasks and responsibilities of the project for spring 2020 were discussed. In addition, the project manager set up a Teams channel in which all material related to the project is be stored. The meeting covered the theoretical sources of autonomous learning as well as three tools supporting autonomous learning to be tested in the co-creation workshop. Those three tools were: The Dynamic Model of Learner Autonomy (presented in chapter 2.1.), The Goal-Setting Pyramid (Figure 2) and Team Canvas (presented in chapter 2.2.1.).

The last meeting of the project team at the end of February before the co-creation workshop focused on finalizing the planning of the workshop. This meeting covered the minute schedule of the upcoming workshop, the practical implementation, the participants, the autonomous learning tools to be tested with the participants and the co-creation methods to be used.

5.4.2 The content of the Co-Creation Workshop

The co-creation workshop consisted of the five sections. The exact schedule can be seen in Figure 10.

Continuous learning in Autonomous Learning

AUTONOMOUS LEARNING WORKSHOP		
Welcome to develop continuous learning!		
1	Welcome	7,5 min
1	Introduction	7,5 min
Things that support autonomous learning		
2	Everyone writes on the sheets and chooses the most important one in their own opinion (max 2)	5 min
2	Let's go through the selected ones in turn (one per person)	25 min
Things that hinder autonomous learning		
3	Everyone writes on the sheets and chooses the most important one in their own opinion	5 min
3	Let's go through the selected ones in turn (one per person)	25 min
Tool testing and evaluation		
4	The facilitator introduces the tools	5 min
4	Free discussion on the topic	25 min
New creative solutions for autonomous learner		
5	Free discussion on the topic	30 min
Total creative work		2 h 15 min

Figure 10. Facilitator's schedule for the workshop

Section 1 was reserved for the facilitator's welcome speech as well as the introduction of the participants. Section 2 addressed issues that support autonomous learning that participants had already considered in the pre-assignment. Participants wrote all the things they had already thought about on their own post it notes, after which they had to choose the one they thought was the most important. After this, everyone in turn presented the most important thing they chose to support autonomous learning. The same method was used in Section 3, which addressed issues that hinder autonomous learning. In the preliminary task, the participants had already considered these factors. Section 4 examined participants' views on three different tools to support autonomous learning. Section 5, the last part of the workshop, was reserved for dreaming. Each participant could write on post it notes about dream tools or things for autonomous learning.

5.4.3 Data Collection

The co-creation workshop accumulates a lot of qualitative data, so in addition to taking notes, it is useful to record the conversation and take pictures. This ensures that all the necessary information is available during the analysis phase. However, it is important to make sure that all workshop participants agree to the recording of their input for research purposes. (U4IoT 2017, 8.) The discussion data was collected by the researcher and the observer/assistant facilitator. Having two persons responsible for data gathering was to ensure that nothing important was left out of the data. The workshop was recorded on two

different devices to ensure a high-quality result, and the approval of the participants was asked for this. Throughout the workshop, the researcher and the observer/assistant facilitator took notes of the discussions. In addition to this, the observer/assistant facilitator took pictures during the workshop. All data written by the participants on the post it notes were displayed on large sheets on the walls of the workshop room. The researcher took the papers with her after the workshop to conduct data analysis. The research data thus included recordings, notes from the discussions, and the participants' post-it notes.

5.4.4 Analysing the data

After the workshop, the written and recorded data collected were analysed using thematic analysis. A description of the analysis can be found in appendix 2. The analysis began by reading through the material several times, after which it was categorized, and attempts were made to find connections to the theory used. After these steps, the researcher considered the whole and began the interpretation.

The purpose of thematic analysis is to extract from the material phenomena or things that are common to several interviewees. When searching for similarities, it is possible to use different methods. Typifying and categorizing is one of the methods, in which the aim is to group the issues raised according to some common features. In the analysis of the interview material, the quantity of the material does not replace or affect the quality. (Moilanen & al. 2015, 110-111.)

The workshop data included written notes of the discussion, a recording of the whole discussions (2 hours and 6 minutes), and post it notes written by the participants. The participants are listed below as well as the perspective they represent.

Company Expert 1: Data Science

Company Expert 2: International Sales and Marketing

Company Expert 3: HR Development in Marketing and Communications

Student 1: University Student in Marketing and Communications

Teacher 1: University Expert in LSP

Teacher 2: University Expert in International Business

The handling of the data began by writing down all the things that the participants wrote on the post it sheets (Image 1). There was little need to use the recorded discussion, as

the notes were regarded as comprehensive. However, the recordings were useful when there was a need to get more detailed information on something. The gaps in the researcher's notes were complemented by the notes made by the assistant facilitator. To be able to identify the answers written by each participant, their initials were written in advance on their post it notes. This was to avoid confusion among the participants' responses. Participants were asked to respond to these four different questions:

1. Things that support autonomous learning in your own organization
2. Things that prevent autonomous learning in your own organization
3. Opinions on the four different tools presented to support autonomous learning
4. An autonomous learner's dream tool



Image 1: Post it sheets in the workshop



Image 2: More post it sheets in the workshop

Data categorization began by writing down all participants' answers to the questions above. After this, questions 1, 2 and 4 were subjected to a thematic analysis, an attempt was made to find the same themes that emerge from the material. In question 3, the participants' opinions on the different tools presented in the workshop were listed. In question 2, the answers were divided into two groups: organizational or personal, which were considered separately.

6 Presentation of the findings

This chapter presents the findings of the Co-Creation workshop. The findings are presented in the order of the workshop questions. First, issues that support employees' autonomous learning are presented. Secondly, issues that hinder employees' autonomous learning are considered. Third, the participants' opinions on the autonomous learning tools presented to them are listed. Finally, the participants' ideas about dream tools for autonomous learning are reviewed. The CORALL project co-creation workshop of autonomous learning was held at Haaga-Helia University of Applied Sciences, Pasila Campus, on 3 March 2020.



Image 3: Co-creation workshop of autonomous learning

6.1 Things that support autonomous learning

In the first part of the workshop, participants were asked to think about what personal and organizational factors support autonomous learning in their own organization. According to the results, among the most significant factors that support autonomous learning were enabling employees to learn in different ways at work, learning from others, and learning together. One of the participants described learning in the workplace as follows (the comment has been translated from Finnish):

“Giving the employee the opportunity to learn is important, They need to be able to devote time for learning. Our company is behind this, it is in the company values.”

Various technical aids that promote social interactions between employees were also highlighted. One of the participants gave the following concrete example from their organization (the comment has been translated from Finnish):

“We had Slack, which is a good way to communicate in a big organization. There were many channels, and one of them was used to find random companions for lunch. That is a good way to get known to each other in a big organization.”

One of effective way to learn from others mentioned by the participants was mentoring programs, in which mentoring pairs are formed between different companies according to what you want to learn.

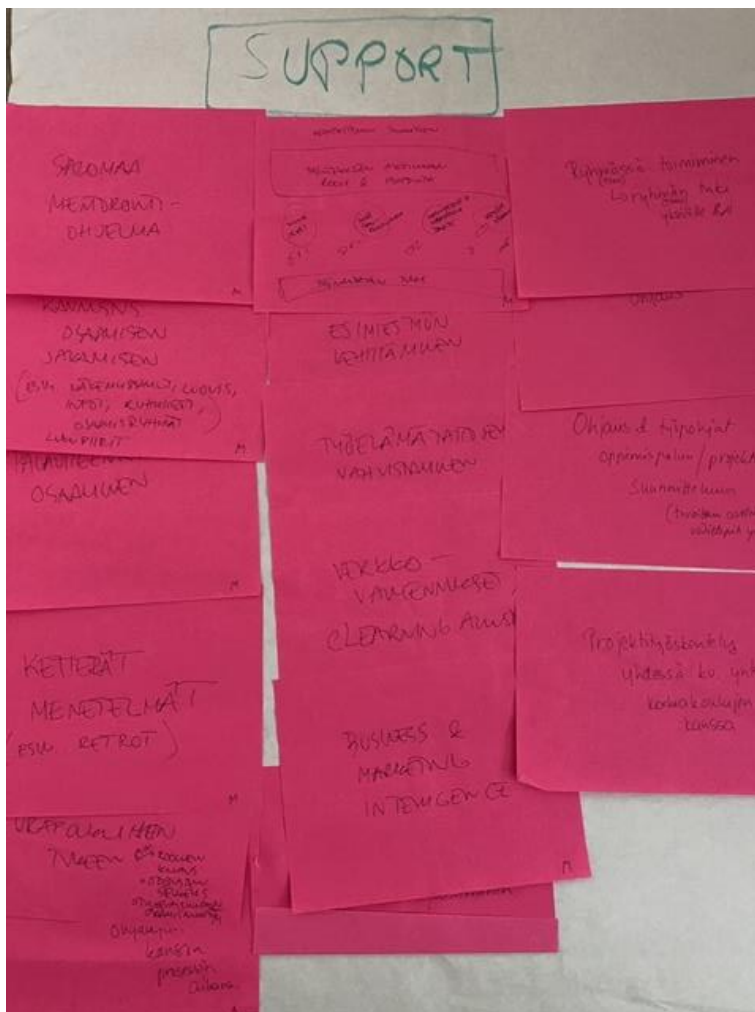


Image 4: Things that support autonomous learning according to the participants (in Finnish)

Other factors that support autonomous learning were 1) identification and development of one's own working life skills with the help of various tools and 2) encouragement for knowledge sharing. All the factors that support autonomous learning highlighted in the workshop are listed in the table below (Figure 11).

The most important thing supporting autonomous learning in your organization?	Other things supporting autonomous learning in your organization?	Other things supporting autonomous learning in your organization?	Other things supporting autonomous learning in your organization?
Channels of communication within the company	Case competitions & Hackatons	Strengthening the learner's self-ability in teaching and supervision	Supervisors who support learning
Continuous monitoring	Open office and clean desk	Strengthening student resilience	"Academy" (online)
Team support, the learner is not alone	Coaching conversation with the instructor during the process	Language teaching	Development Path Design where the employee has an active role: Know Yourself, Me Opportunities, Prepare & Define Goals, Develop Skills + Employer Support
Giving the employee the opportunity to learn	Information retrieval guidance	Teacher support	MBTI / Other self-knowledge support
When the employee embarks on a learning path, it needs to be recognized.	Working in a group (team) -> group (team) support for the individual	Business & marketing intelligence	Encouragement to share knowledge
International opportunities	Confirming Success: "Celebrate"	Leadership & management development	Agile methods
Mentoring program	Project work together with different stakeholders	Strengthening employees' working life skills	From the recruitment stage onward: support for development & career paths, eg. description of roles, clarity of expectations, future thinking

Figure 11: Things that support employees' autonomous learning

6.2 Things that hinder autonomous learning

In the second section, participants were asked to consider which things prevent employees' autonomous learning and those were divided into organizational and personal factors. There were slightly more personal factors that hindered autonomous learning than

organizational ones. The most significant factors highlighting employees' autonomous learning in the work environment were 1) lack of the feedback, 2) timetabling that does not support work that requires creative thinking, and 3) low self-esteem and lack of confidence in one's own learning. Regarding timetabling, one of the participants described the situation as follows (the comment has been translated from Finnish):

“Creativity is needed in expert work; the employment contract states 37,5 hours per week as working time. Working time is defined as the time when you are at a workplace or a meeting, which has nothing to do with creativity. In fact, I have noticed that when you take it easy, the best ideas come to you.”

Deficiencies in self-management and time management were also highlighted as factors hindering autonomous learning. Also, the fact that there is simply no time for learning due to constant stress and hurry was considered a hindrance. One of the participants also highlighted the effect of rapid digitalization (the comment has been translated from Finnish):

“The speed of digitalization - the need for learning is like trying to hit a moving target.”

Lack of motivation and too strict and narrow work roles and job descriptions were also mentioned as personal obstacles to autonomous learning.

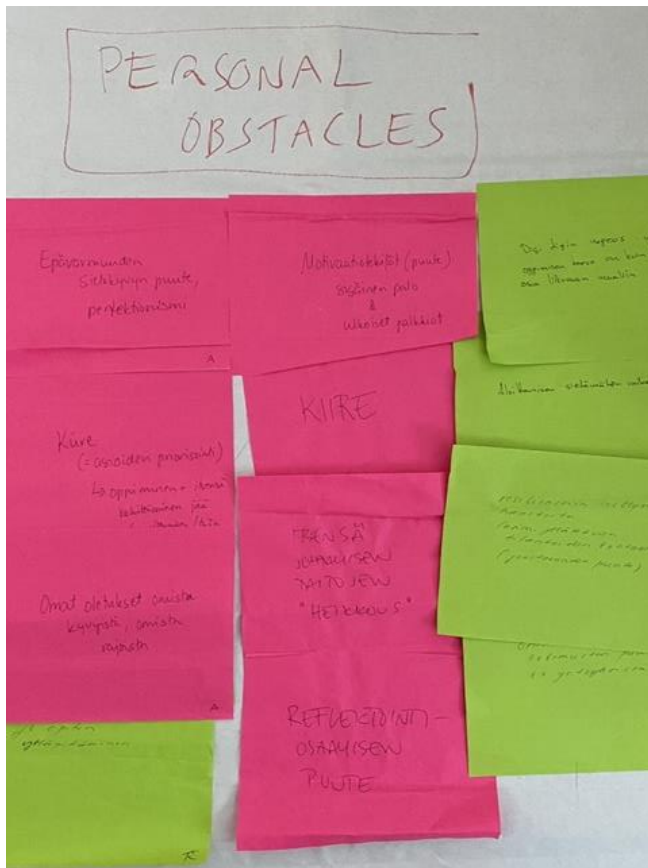


Image 5: Things that hinder autonomous learning according to participants (in Finnish)

Figure 12 sums up the personal factors that prevent employees' autonomous learning according to the participants of the co-creation workshop.

The biggest personal obstacles to autonomous learning in your organization?	Other personal obstacles to autonomous learning in your organization?	Other personal obstacles to autonomous learning in your organization?	Other personal obstacles to autonomous learning in your organization?	Other personal obstacles to autonomous learning in your organization?
Lack in experiences of success	Feelings of guilt for wasted working time	Lack of reflection skills	The speed of digitalization	Hurry
Lack of uncertainty tolerance and too much focus on perfection	Maintenance of what has already been learned	Learning and self-development are left out due to over emphasis on execution	The unbearable difficulty of getting started	Weaknesses in self-management skills
Can't say you can't, even if you don't know things and then take unnecessary risks	Maintaining motivation when challenges arise	Lack of motivation due to internal fears	Time management	Lack of skills to learn together with others
Lack of professional confidence	Resilience challenges (eg. In encountering unexpected situations and lack of flexibility)	Own assumptions about personal abilities and limitations		

Figure 12: Personal obstacles to autonomous learning

Figure 13 sums up organizational factors that prevent employees' autonomous learning according to the participants of the co-creation workshop.

The biggest organizational obstacle to autonomous learning in your organization?	Other organizational obstacles to autonomous learning in your organization?	Other organizational obstacles to autonomous learning in your organization?
Work schedule does not support creativity	Roles and job descriptions are too precise	Sharing failures with others
Deficiencies in some elements of the feedback system: human interaction, culture, technology	Too strict processes and responsibilities	Strongly externally controlled process (leaves no room for self-direction)
	Lack of support for learning	Looking at things in the short term only
	Learning from mistakes is not part of the learning culture	Lack of resources
	No psychological safety	Micromanagement
	It is not known which area of expertise should be focused on	

Figure 13: Organizational obstacles to autonomous learning

6.3 Comments on autonomous learning tools

In third section of the workshop, three different autonomous learning tools were introduced to the participants and their task was to evaluate tools. The tools presented to participants were The Dynamic Model of Learner Autonomy (presented in chapter 2.1.), The Goal-Setting Pyramid (Figure 2) and Team Canvas (presented in chapter 2.2.1.). The participants discussed the use of these tools in both university and workplace environments.

The Team Canvas was considered as useful in both environments. It was said that Team Canvas concretizes abstract things, and making abstract things more concrete is often the prerequisite of team success. One of the participants described the Team Canvas as follows (the comment has been translated from Finnish):

“I like canvases. They concretize the abstract. When abstract things are opened up, people can start to implement them in practice.”

And another participant described the canvas as follows (the comment has been translated from Finnish):

“Team Canvas is also a nice and fun way to play together.”

One participant also questioned whether the Team Canvas was easy to use and if teams always have patience to fill in the canvas. Another participant with experience of the canvas tool replied that it is very useful in virtual work as part of team building and getting to know each other, but if you only fill it in from a factual perspective, the tool can be boring for team members and they might not commit to using it.

The Goal-Setting Pyramid (Figure 2) was seen as a useful tool, which could be used when setting one's own goals and comparing them with the employer's goals both in the short and the long run. Participants were also asked to evaluate The Dynamic Model of Learner Autonomy (presented in chapter 2.2). Simple and easy-to-follow visuals were considered as an advantage of The Dynamic Model of Learner Autonomy.

6.4 Dream tools of autonomous learner

The last part of the co-creation workshop was about discussing new creative solutions for autonomous learning: "dream tools" for an autonomous learner. A lot of ideas were expressed first, and then the participants had to choose the most important one for themselves. Personalized and multi-level goal setting was mentioned as one dream tool, which could be useful for making visible and monitoring one's learning. Individual

guidance (dialogic relationships), working together, and meeting different people from different backgrounds were also highlighted as important factors supporting autonomous learning. Identifying the learner's needs on a personal level, in relation to the learning culture, skills, goals, and time management abilities, was also mentioned as an important factor.

One of the participants felt that it is very important to link increases in work responsibilities with learning and development (the comment has been translated from Finnish):

“When you embark on a learning path, it needs to be recognized. When you do something right, your responsibilities should grow. Gaining more responsibilities would be a sign that you are trusted and your learning is valued. As the importance of your role grows, the benefits of your learning are made visible. You get a feeling that “I do work that matters.”

Another participant highlighted the learning culture of the organization as the most important thing for fostering autonomous learning (the comment has been translated from Finnish):

“Developing the whole learning culture is important. Learning should be allowed to happen in the best possible way: learners need psychological security, relevant networks, and so on. Anything that supports team building is a good tool. However, it is not so much about individual tools, but more of a cultural issue.”

Figure 14 presents the autonomous learners' dream tools that were suggested in the co-creation workshop.

What is the most ideal "dream tool" for an autonomous learner?	Other autonomous learner's dream tools?	Other autonomous learner's dream tools?
Individual solutions	Rotation of tasks	Authenticity -> authentic learning environment, teamwork and learning tasks
Working together and meeting different people from different backgrounds	Supervising the learner, taking into account emotions. Genuine encounters and individual support	Personal mentoring
When an employee does something right, their responsibilities should be extended. Gaining more responsibility is a sign that you are trusted.	A learning path with clear milestones and tools to follow them	Learning objectives included in the work culture and self-development in the working hours
Identify the learner's needs on a personal level	Appropriate balance between structure and freedom	Team / other people -> sparring, discussion, support
Developing the whole learning culture		

Figure 14: Autonomous learners' dream tools

6.5 Summary of the findings

This chapter summarizes the results of the CORALL project co-creation workshop and presents main findings. The factors that support autonomous learning (Figure 15) are divided into two different parts: personal learning and development and workplace learning and development. Both require organizational input and support, but the latter is more focused on the role of the organizational factors. Personal development means developing an employee's working life skills as an individual. Enabling workplace learning as part of work and organizational tasks includes, for example, sharing information between employees, mentoring and coaching opportunities, and allocating work time for learning. As can be seen in Figure 15, the most significant things that support employees' autonomous learning are strengthening the employee's self-management and time management skills, offering digital tools that can be used to communicate and support colleagues, giving employees time to learn during their work hours, sharing information within the organization, and utilizing various mentoring and coaching programs.

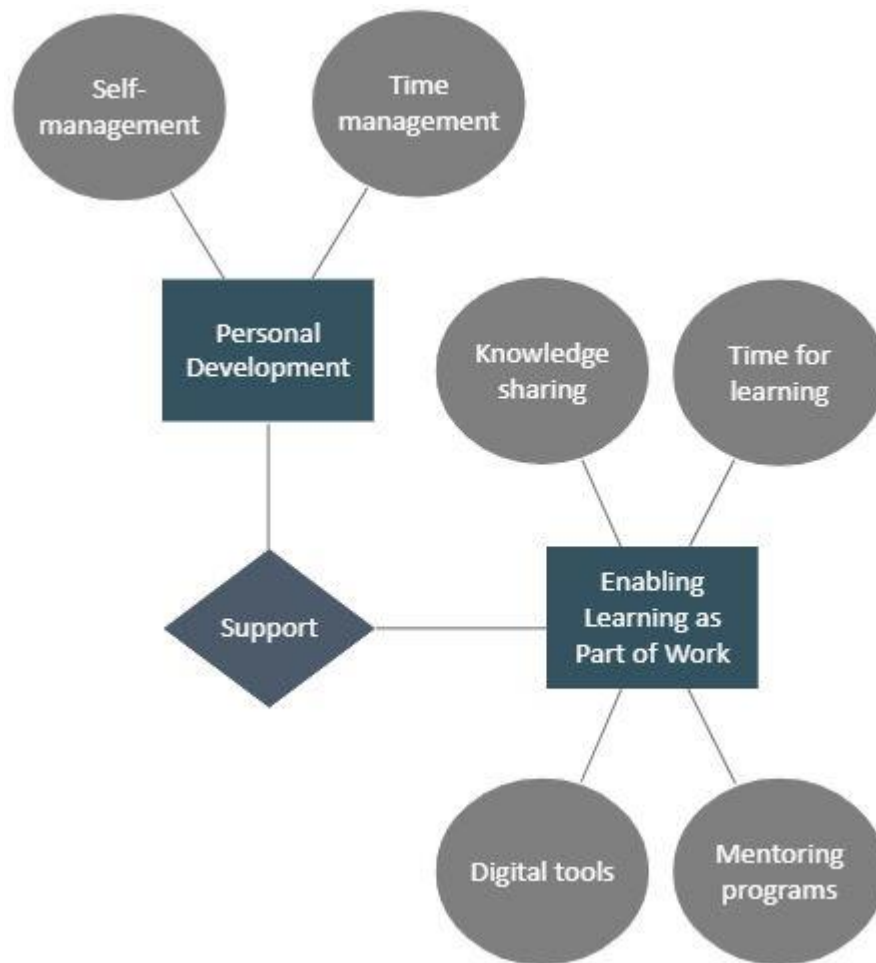


Figure 15: The factors that support autonomous learning

Factors hindering autonomous learning (Figure 16) are also divided into two parts: personal factors and organizational factors. Personal factors include various deficiencies in one's own skills, while organizational factors include things that are hindering employees' autonomous learning in the workplace. As can be seen in Figure 16, the most significant personal factors hindering employees' autonomous learning are deficiencies in self-management skills and work motivation, as well as low self-esteem. The most significant organizational factors that prevent employees autonomous learning are constant hurry, shortcomings in the feedback system and process, and constraints and rules that affect the job description (e.g. lack of allocated time) that do not support creative work and learning.

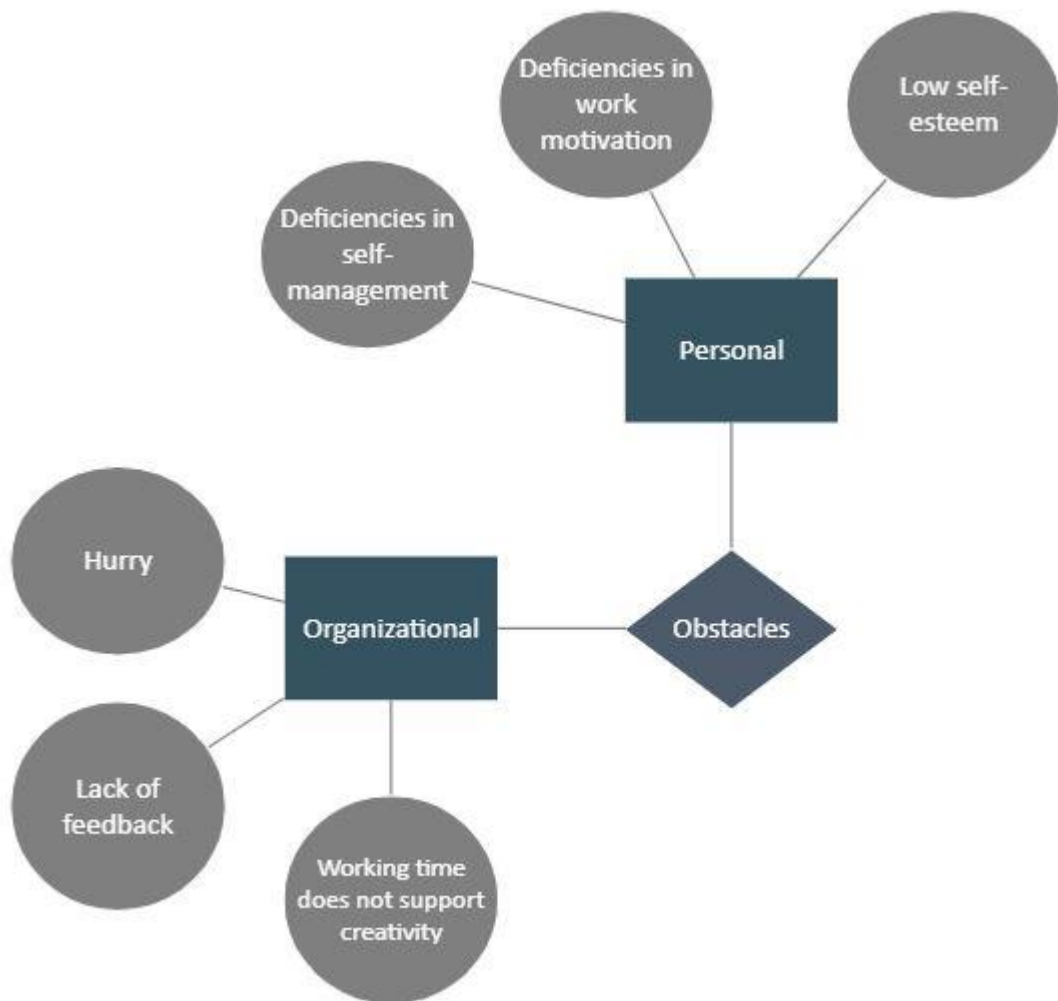


Figure 16: Obstacles to autonomous learning

The most significant of the autonomous learner’s dream tools, or rather goals, can be seen in Figure 17. The first dream goal is to develop the learning culture of the whole organization so that learning is an integral part of key activities in the organization. The second goal is to give the employee more responsibility when she or he learns new things, which means increasing his/her responsibilities based on increased learning and experience. The third dream tool is personal guidance, as everyone has their own learning needs and these should be addressed. The fourth dream tool is related to the need to be able to set learning and development goals also on a personal level, avoiding organizational mass goals that are equally imposed on everyone.

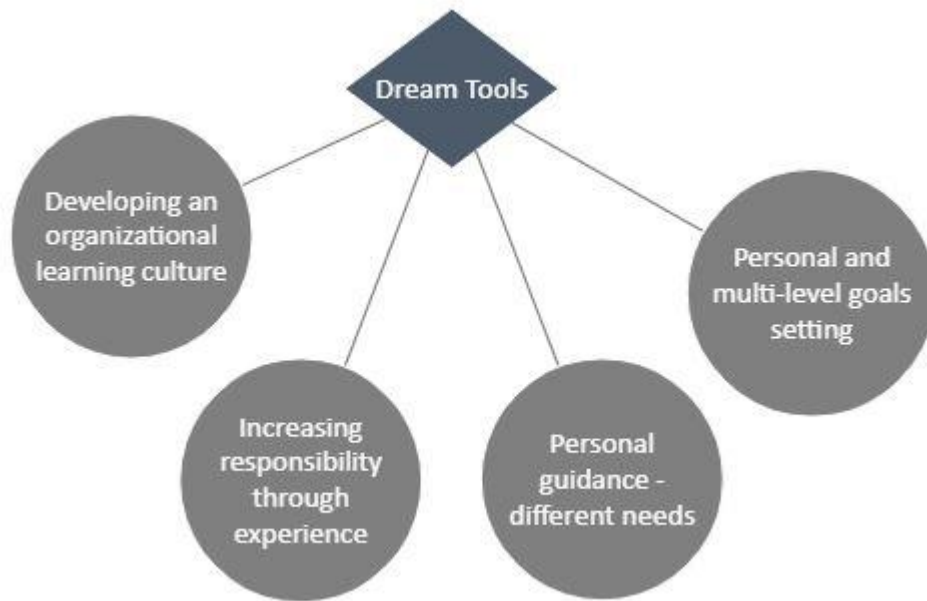


Figure 17: Dream tools and goals of autonomous learning

A complete summary of the study findings can be found in Appendix 3 of this thesis.

7 Discussion

This final chapter presents the conclusions of the study and considers its reliability. The chapter also presents how the phenomenon of autonomous learning could be further investigated in the future. The benefits of the researcher's input for the CORALL project are discussed. Finally, reflections on the researcher's own learning are presented.

7.1 Conclusions

The purpose of this study was to study what supports employees' autonomous learning in organizations (universities and workplaces), what are the biggest obstacles to employees' autonomous learning, and what would be new creative solutions for the employee's autonomous learning. The more specific context in which autonomous learning was considered during the workshop discussions was that of international marketing and communication, as all the workshop participants had first-hand knowledge and experience in this context and subject area. However, the researcher feels that the key results of the study can be extended to any learning and development context requiring autonomous learning.

Based on the results of the study and supported by autonomous learning theory, it can be stated that employees should not be left alone in their efforts of autonomous learning. An organization can support autonomous learning, and it must be planned carefully and in a systematic way. The need for autonomous learning is likely to increase in the future in working life, so the phenomenon is worth paying special attention to. Learning in working life should be an integral part of the corporate and organizational culture. The need to be able to share information between different stakeholders also emerged as an important factor supporting autonomous learning. This can be facilitated by creating a corporate culture that supports autonomous learning in various ways.

According to the research results, taking the individual into account as a learner and setting personal goals is important when it comes to supporting autonomous learning. Every individual has their own needs, and these should be considered. This also has implications for learner motivation. Based on the research results and theoretical framework, it can be stated that it is worth investing in the development of employees' self-management and time management skills, as these skills directly support autonomous learning. The use of various mentoring programs should be encouraged.

The research results show that the factors hindering employees' autonomous learning can be counterbalanced by introducing support for autonomous learning. This is an important

observation, as it provides evidence that autonomous learning can be developed and supported if support structures are put in place and implemented as part of the corporate culture.

7.2 Validity, reliability, and ethical issues of the study

Assessing reliability and validity is usually an issue applied to quantitative studies. Research reliability refers to the replication and consistency of a study. When a researcher can repeat the same research method again and achieve the same results, the research is considered reliable. However, the purpose of a qualitative study is not necessarily to repeat the study again, as qualitative results belong to specific contexts and the data has been collected in situations that may change. When interviews are used in data collection, the diversity of the topic can be explored. The reliability of qualitative research can be ensured by paying attention to careful planning and implementation during the research process. It is important to explain exactly how the data was obtained, how the data was analysed and why certain methods were chosen. The use of more than one person for interviews, observations, and data analysis also improves the quality and internal reliability of the study. (Saunders, Lewis, & Thornhill 2016, 202; 205; 398-399.)

It can be stated that the reliability of this study was achieved as the researcher managed to accurately describe the whole research process: why this method was chosen, how the research data were collected and how the research data were analysed. The theoretical framework was also actively used in the analysis of the data and in the presentation of the research results. In the co-creation workshop, data collection was done by two people to ensure that all data was recovered, which also improved reliability. The research results were also discussed and interpreted by several people, first at Haaga-Helia and later between the different CORALL project partners from different countries. The interpretations were in line with those of the researcher and the theoretical framework used. The reliability of the research was also strengthened by the researcher's project management skills and systematic research approach, carefully recording the research phases and opening up the different research steps.

In addition to reliability, it is important to evaluate the validity of the study. The validity of the study refers to the appropriateness of the selected measures, the accuracy of the analysis of the results and the generalizability of the findings. Semi-structured and in-depth interviews can achieve a high level of credibility because it is possible to use probing and clarifying questions, thus examining answers from different perspectives and testing potential meanings and interpretations. (Saunders & al. 2016, 202;400.) It is possible to assess whether the methods used in the study were appropriate for the

purpose, whether the research results were relevant in view of the overall research purpose and whether the research results can be generalized to some extent.

It can be stated that the chosen methods of this thesis, the organization of a co-creation workshop and the acquaintance with the theoretical knowledge related to the topic, confirm the validity of this research. The co-creation workshop was carefully prepared, and it highlighted issues relevant to the phenomenon. The research data is presented systematically, which also supports the validity. The use of a facilitator in the co-creation workshop supported the interviewees, as the facilitator was able to clarify the issue and get more in-depth answers from the participants using different interview and co-creation methods. Participants in the co-creation workshop also represent different perspectives to a shared challenge, which also supports the validity of the study.

Various ethical issues also arise when designing research. In the context of research, ethics refers to standards of behaviour that guide a researcher's behaviour in relation to the assumptions of the individuals affected. In the data collection phase, it is important to maintain objectivity. This can be facilitated by planning and organizing the data collection process carefully. In this way, subjective selectivity in the recording phase can be avoided. (Saunders & al. 2016, 239; 255.) In this thesis, interview data were collected using several different methods: recording, taking notes from the discussion, and writing down participants' responses. The notes were taken by two people which helped fill in the gaps in the notes. The recording was also done with two devices to avoid risks, and all participants were asked for permission to record at the beginning of the event.

7.3 Reflections on future research

This subchapter discusses how the research topic could be further researched and considers the role of the researcher in the CORALL project and the benefits of the research results for the whole project.

The study provided insight into how autonomous learning can be promoted in organizations. Next, it would be interesting to examine in more detail how individual learners perceive these results. The ways to support autonomous learning and potential new tools for autonomous learners should also be tested in universities and workplaces to see which kinds of effects they have on autonomous learning.

Another new research perspective could also be the impact of different organizations on autonomous learning. The effect of company size and number of employees could be studied, for example, by comparing more hierarchical large organizations with smaller start-up companies. Another perspective could be to compare organizations in different

sectors and their impact on autonomous learning. Autonomous learning in workplaces has not been studied to the same degree as autonomous learning in the educational environment, so there is another avenue of study in the future.

When considering the benefits of this research for the CORALL project at Haaga-Helia, the following can be stated. The schedule for the first phase of the project was tight, so the researcher's role in finding a theoretical framework and analysing the research data eased the workload for the entire project. In the workshop, the researcher played an important role as an observer and data collector, which helped other project participants focus on the event itself as well as on the participants. Considering the whole CORALL project, this co-creation workshop brought valuable additional information, as the participants had been selected so that they represented several relevant perspectives to autonomous learning. The results of the study were also well in line with the theory used in the study.

7.4 Reflections of learning

For the researcher, this opportunity to carry out a Master thesis as part of the CORALL project was a great opportunity. The researcher had not previously been involved in this such international projects and found the involvement extremely motivating. Autonomous learning was a topic rather unknown to the researcher, and her own knowledge of the topic increased significantly. The researcher found the topic interesting because she had identified challenges of autonomous learning in her own working life as well. With this thesis, the researcher gained a lot of information on the topic and it will certainly be useful for her in the future.

The researcher was involved in organizing a co-creation workshop for the first time, so planning and organizing the workshop was a new experience. The researcher also found that her own project management skills were useful in this type of research project. The large amount of theory on the subject and the high amount of time needed to go through theoretical materials surprised the researcher and the process took much longer than she thought. During the thesis project, the researcher learned many useful ways of searching for and making use of information. The researcher felt that writing the thesis as part of the CORALL project helped her to stay on schedule, since the schedule set for the project facilitated her own scheduling as well. The researcher would have wanted to get acquainted with the theory even more before the workshop. Due to the tight project schedule, a large part of the theory background was read only after the workshop.

At the beginning of the thesis process, the researcher set the goal of completing the work by Q4 / 2020 (Figure 6), which was realized. The researcher also conducted a risk analysis (Figure 7) at the beginning of process, the implementation of which is now being assessed. The researcher had identified strengths in organizational skills as well as a systematic way of working. These measures helped advance the thesis process as well as stay on schedule. The researcher had named impatience and inexperience in scientific writing in English as potential weaknesses. Impatience increased the researcher's stress, especially in the fall of 2020 when she had hectic time in her life. Writing the thesis in English, on the other hand, did not turn out to be an issue. The researcher had identified new learning opportunities and an interesting topic as opportunities, both of which motivated her during the thesis process. The researcher had named carrying out the thesis while working full time as a threat, and this turned out to be a challenge in the autumn of 2020. However, due to good organizational skills and flexibility, the researcher managed to make time for writing the thesis. Overall, the researcher is very satisfied with the thesis process and its outcome.

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Attachments

Appendix 1. Pre-assignment for the participants of Advisory Board workshop

Ennakkotehtävänä ennen tiistain 3.3. workshopia:

- Listaa itsellesi, minkälaiset henkilökohtaiset ja/tai organisatoriset tekijät 1) **tukevat** ja 2) **estävät** itseohjautuvaa oppimista omassa organisaatiossasi.
- Tuo molemmat listat mukana workshopiin ja varaudu kirjoittamaan ideasi post-it-lapuille.

Muistin virkistämiseksi alla on viisi edellisessä workshopissamme tunnistettua **itseohjautuvan oppijan tärkeää ominaisuutta**, joita tarvitaan kansainvälisissä liiketoimintahaasteissa.

1. luo verkostoja kulttuurien välillä ja kehittää aktiivisesti kielitaitoaan
2. etsii intohimoisesti uutta ammatillista ja kulttuurillista tietoa sekä ennakoivasti että tarpeen mukaan
3. ei pelkää isoihin haasteisiin tarttumista ja kokeilee ennakkoluulottomasti uusia ratkaisuja
4. on empaattinen tiimipelaaja ja jakaa tietoaan aktiivisesti
5. pitää itsensä ajan tasalla kansainvälisistä trendeistä ja digitaalisesta kehityksestä

Lisäksi tunnistimme **itseohjautuvaa oppimista vaativia kv-liiketoimintahaasteita** seuraavasti:

1. Puutteellinen tietämys kulttuurieroista ja kieliosaamisen ongelmat
2. Strategisten verkostojen puute ja oikeiden partnereiden löytäminen
3. Jäykät kulttuurisidonnaiset hierarkiat ja toimintatavat
4. Datan ja digitaalisten tietolähteiden hyödyntäminen asiakasymmärryksen hankkimisessa
5. Epäonnistumisten hyväksymisten ja niistä oppiminen

Appendix 3. Employee Autonomous Learning

