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STUDIFICATION – PROCEDURES TO FORMALIZE OUTSIDE CAMPUS INFORMAL LEARNING

J.A. Tiili¹

Tampere University of Applied Sciences
Tampere, Finland

S.A. Tapani

Tampere University of Applied Sciences
Tampere, Finland
ORCID 0000-0001-6274-7028

J. Ruokolainen

Tampere University of Applied Sciences
Tampere, Finland

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ABSTRACT

Today, students enter universities with more varied backgrounds than before. During their studies, they may work actively and take part in different societal activities. These activities can develop competencies that are already included in their academic curriculum. Studifying work or societal activity means recognizing and utilizing this competence development as a part of learning. In this way, several advantages are found. For example, study times are shortened, learning environments are widened and self-regulation skills are developed while students will be more and more owners of their learning processes. Studification is the next step after recognizing prior learning. It can have a significant role in the current pandemic and future post-pandemic situation, where we need to find alternative ways to study. Studification of work or similar activity is not easy. It requires well-defined processes and procedures. Curriculums must be competence-based so that the learning outcomes from work fit with competence-based assessment criteria. It also requires a change in the learning atmosphere among the teachers, organizational leaders, and students. Leadership must support the new ways to study, and finally, students must be ready for active learning ownership.

¹ *Corresponding Author*

J.A: Tiili

juho.tiili@tuni.fi

1 INTRODUCTION

The current COVID-19 pandemic forces us to look for new ways of teaching and learning in HE from a resilient perspective. Resilience can be understood as an ability or competence to overcome a change caused by a disturbance, shock or stress [1]. Covid-19 forced educational institutions to re-check their bases for learning possibilities. The situation forced us to see the curricula via new eyes. Restrictions and regulations limit the number of people gathering in lectures or labs. Traditional theoretical lectures are transferable into an online format to Zoom or Teams, but there are other ways to help our students learn and assess it. One possibility to help students proceed with their studies is to find out the possibilities of learning outside the classrooms: working or taking part in other societal activities. There is a possibility for learning by doing, and new ways to be a teacher. This means that teachers reduce their teaching time and become more like counselors. There is a need for theorizing the outside world learning experiences. That is what we call studification. One crucial point is that studification is not an automatic trick to turn off-campus working hours into ECTS credits. Expected learning outcomes must be at the correct EQF-level and in line with the learning outcomes of the degree students are aiming at. If studification is taught on a broader perspective, it also gives possibilities to include some learning contents that generally are not included in a student's degree. For example, suppose a student is working with robotics, and the contents of robotics are not included in the student's regular curriculum. In that case, studification gives a possibility to tailor the degree contents according to student's competencies and preferences. In this paper, we concentrate on possibilities of studification in EE during the Covid-19 era. We have analyzed reports on studification in the Finnish HE context and empirical data collected from EE at TAMK. In the end, we will show some pros and cons for studification.

2 STUDIFICATION IN GENERAL

Studification is a method (or process) to formalize informal learning that students learn in their outside-campus activities, work, or societal activities. It is always goal-oriented. The goals, the learning outcomes must be in line with the student's curriculum or degree that he/she is aiming at.

Why studification? Globally, there is a need to rethink the ways to promote employment. There is a need for a solid commitment to education and skills. Work and its demands are changing rapidly and bring along a need for upskilling and continuous learning for people who already are in working life. The traditional

classroom and time-based learning need to be refreshed towards more resilient learning models to serve this requirement.

For students, studification offers a possibility to shorten the study times and use their work and hobbies as a part of their studies. Students also want to study for life, not for a degree, and that should also be in the interest of universities of applied sciences [2]. Combining work and studies helps students commit to their studies, future profession, and society [3]. As a part of competence-based education, studification offers a possibility to concentrate on studying new things, not on those already mastered.

In the Finnish context, there is a trend that students are working more and more besides their studies: 50-60 % of HE students work at the same time they study, and the average working hours are 15-24 hours per week [4]. Vanhanen-Nuutinen et al. found it as a double-edged sword: if working is too demanding, it takes energy and time from studies, but if the demands fit well with the content of the studies, working is found as a source for study motivation and learning, and this point of view should be utilized more while organizing studies.

3 PREREQUISITES FOR SUCCESSFUL STUDIFICATION

There are three prerequisites needed to make studification possible: supportive and guiding teacher, self-regulated student, and well-defined organizational processes.

The teacher needs to know the curriculum and assessment criteria profoundly; he/she needs to know the working-life and how to combine it with studies or study modules. The main task for a teacher in the studification process could be that he/she will offer the possibility for students to study outside the campus and classrooms. This means that teacher is able to see the possibilities to learn in working-life and in societal activities. There is also a need to guide students in their studies, offer and show them possibilities. "The guiding/counseling teachership" could be the synonym for a modern way to be a teacher. Teachers' work in current vocational and higher education is very fragmented: in studying recent reports or researchers among vocational teachers, 53 separate skills were identified. Anyway, they could be summarized in three main categories: scholarship in teaching and learning, scholarship in authentic learning and development, and scholarship in evaluation and monitoring [5]. In studification, teachers need all these: understanding the possibilities of authentic learning and evaluating it plays a central role in successful studification.

The second essential part is the student and his/her willingness to study alternatively. This willingness has to do with both self-regulation and self-efficacy. Students are maybe not born self-regulated but can be taught to be: [6] have noticed in their study in the Finnish teaching context that students can learn to be self-regulated if they have the possibility for that. There is still a trend among students that they also want to learn traditionally: they want to be taught. This students' trend means that the competence of teachers is needed to make the learning shift happen [7]. In the review of 108 self-regulated learning articles, self-regulated learning (SRL) concerns students that actively take command of their learning. Researchers in this review share the opinion that SRL is linked to academic success. SRL has become much more critical for students to complete their education: students need to see learning goals and their benefits. The core of the SRL can be found to achieve learning goals [8] and its ability to help survive, for example, in the information jungle.

This all is embedded in the educational context. The procedures, well-defined or not, play a remarkable role in the successful studification. Prerequisites for the education organization are willingness for studification, competence-based curriculum, competence-based assessment criteria (competence-based thinking overall), and the processes and procedures to implement studification.

The willingness means that the educational organization recognizes that working-life is a learning environment that can produce university-level learning outcomes if the process is appropriate. University staff must also be committed to the idea and the process. University's curricula and assessment criteria must be competence-based. The targeted competencies are easy to transfer and modify into working-life context and recognizable by a student who wants to start the process. The process itself needs well-defined procedures to succeed. Procedures help to maintain the quality that is required in HE.

4 BASIC MODEL FOR STUDIFICATION AND EXAMPLES

4.1 The basic model of studification

The basic model for studification is presented in fig. 1. It was presented in Verkkovirta-project [9] in 2017.

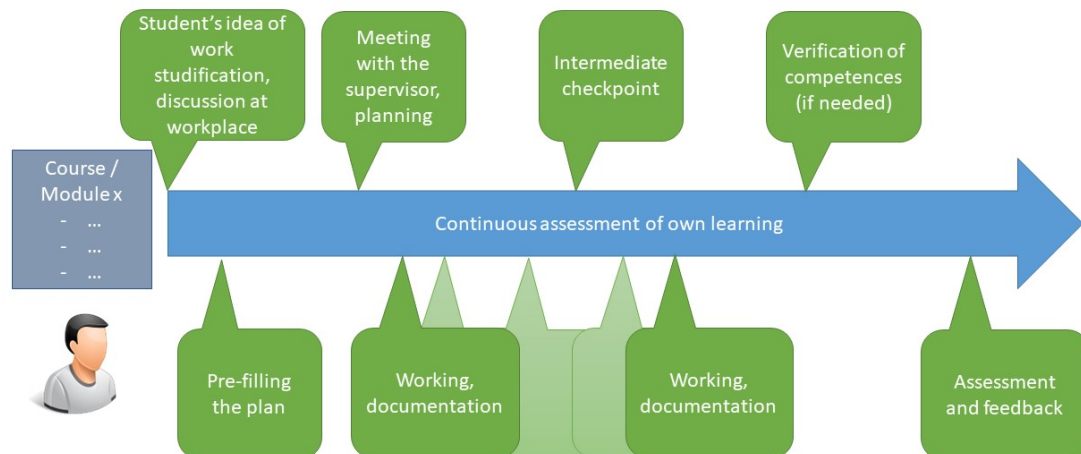


Fig. 1. Basic model for studification [9] modified

The initiative for studification always comes from a student. This student works or has such a societal activity that develops competencies that are included in his/her curriculum. He/she must know the curriculum and the activity so well that competencies are identifiable on both. Of course, the curriculum must be competence-based. After the initiative student makes a plan for studification, which a supervisor from the university approves. In approval of the plan, goals and the methods to verify that the goals are reached are agreed upon. During the work or activity, the student carefully documents the development. After the work or activity period, there is a possibility to verify the learning if needed. At the end, there is a time for assessment and feedback.

It is essential to admit that some parts of an engineering degree are easier to study than others. If the engineering curriculum is very content-oriented or if the skills targeted are very theoretical, it may be difficult for a student to find content for studification. If there are some meta-skills or common skills written in the curriculum, they are more accessible to study. For example, the theoretical basis of engineering degree, mathematics, and physics are challenging to study in working life. Still, study modules that include more practical things like engineering design, planning, and customer relations, are more accessible.

Studification is also an essential tool for continuing education. Suppose curricula are written in competence-based, and they are read and interpreted resiliently. In that case, some more significant parts of curricula can be replaced by a various, but equal level professional or academic competence that student has gathered in his/her earlier working life.

4.2 Some examples of studification in engineering

One concrete example of studification is described in mechanical engineering [10]. A student can carry out extra practical training (30 credits) in addition to the standard 30 credits training. A student may utilize the competencies gathered in his/her workplace and add this content to his/her degree. Studification at Tampere university of applied sciences offers students a way to personalize their study plans. A student may present a study module that he/she would like to study via studification: the student's self-regulation is needed because it is his/her task to suggest how to study the module. The study module can be something else that is taught at the university, but the student can study it while working.

For example, the Tampere University of Applied science contacted a student who has not been active with his studies for a year. The student had completed his thesis. He still has 30 credit points left to complete his studies. The discussion with the student revealed that the company was planning to implement a new PHP framework for their programmers. Tampere University of Applied science proposed using the studification option for this implementation work. It was proposed that the student write a learning diary to deepen his expertise of the system and its programming tools while working on a programming project. It was also proposed to this student that he could increase his understanding of cash flow management and liquidity. His programming work embraces these topics strongly. This approach could improve this student's programming work with these topics' specifications. Learning diary should include reflection on articles and blogs. We believe that this student could his expertise and learn to improve new meta-skills, e.g., learning to learn.

All work can be helpful in learning skills needed in life and in society. In every work, there is a possibility to learn at work so-called meta-skills that are useful in all branches. Some students argue that it is also helpful to work in other areas that the study field [4]. In Eurostudent study, it was recognized that the best hits for working and studying were in social & health care and tourism fields. In technical branches, the students worked less than in other fields, but they worked more hours than others. Student experience also says that

By combining work to studies, they could identify some phenomena that were not considered in the studies [4].

But of course, all jobs are not helpful for all studies. Sometimes work is just for work, something to add to cv. Maybe an engineering student in a supermarket as a salesperson is not learning for studies but life.

5 CONCLUSIONS

Studification can be seen as a new, different method for students to study and learn. At the Tampere University of Applied Science, the teachers feel that studification in a single course for a single student is laborious. Therefore, the teachers promote the idea to accept a large set of studies as a result of the studification process. It also offers teachers ways to see their work and update it. It has several pros and cons depending on the point of view. They are presented in Table 1.

Table 1. Pros and cons detected

	Pros	Cons
University	<ul style="list-style-type: none">• Shortened study times• Increased student orientedness• Closer relations to working life for teachers• Possibility for variations in degree contents – working life-oriented curriculums	<ul style="list-style-type: none">• Ineffective compared to traditional lecturing• Requires deeper understanding of working life• Needs time and especially interest to personalize student's paths
Student	<ul style="list-style-type: none">• Shortened study times• Richness in study methods• Combining studying and working• Stronger relation between theory and practice• Possibility for variations in degree contents	<ul style="list-style-type: none">• May need more time compared to traditional methods• Not possible for every content• Needs self-regulation skills

The essential advantage of studification concerns the possibility to re-educate academic people who have already been working for years. A rapid change in working life and technology leads to massive needs for continuous education, leading to university degrees or perhaps some smaller but well-defined and recognized academic certificates. One of the teachers emphasizes as follows: "Working life can enable the emergence of skills that are not included in the curriculum, but which are nevertheless key skills in the field."

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