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CO-CREATION IN HIGHER SECONDARY SCHOOL ENGLISH CLASSES: A CASE  
STUDY  
MA thesis

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## **ABSTRACT**

### **Co-Creation in Higher Secondary School English Classes: a Case Study**

Co-creation and trialological approach has been studied in tertiary and primary education but at secondary level the research so far has been scarce. The aim of this master's thesis is to explore the ways co-creation can be used in higher secondary school English classes in a situation where traditional study materials are not used but the requirements of subject curriculum still have to be followed. Quantitative research was carried out in Rocca al Mare School, Tallinn, Estonia, during the academic year 2018/2019 with one group of Year 10 English students (16 students), their English teacher. The teacher kept a diary of all the activities and content management decisions taken in Year 10 English course and reflected on them. Students were interviewed and their opinions incorporated in the research. The results of the case study indicate that co-creation fosters good relations between peers, enhances students' participation and involvement in language learning process and increases interest in study content. Co-creation can be used to perform a wide variety of tasks necessary for foreign language learning within a given framework of topic areas. Choosing a suitable study management system creates opportunities for designing and carrying out activities that require following co-creational principles.

**Keywords:** co-creation, teaching English, study management system

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## INTRODUCTION

The current research stemmed from a problem I was facing in the beginning of the academic year 2018/2019. I was to teach English in the beginning of higher secondary school level, in one of the six language groups in Year 10 and do that with the use of a study plan compiled together with my colleagues and materials compiled entirely by myself. My initial questions were from the organisational side – not using a set of language course materials also meant that the keeping track of different study materials had somehow to be considered and a framework to support students doing the same created. Contemplating the issue of particular materials to use and being aware of the extent the students are referring to materials they have access to and make use of I began wondering how much of the study content could actually come from students' side – them suggesting texts and videos to be used in class for language learning purposes. I also realised that I might need a platform that would provide a frame within what to work and keep the matters organised. Based on these deliberations the focus of the research is co-creating study materials in higher secondary school level based on Year 10 English class using Google Classroom are. In particular, I am trying to establish a way to manage studies in language classroom where there is no official framework in the form of a particular set of course materials and investigating potential activities to maximise student input and involvement in as many parts of their study process as possible.

Aspects of co-creation have been studied at the tertiary education level. Such aspects include among others values co-creation (Fagerstrom & Ghinea, 2013; Judson & Taylor, 2004), co-creating atmosphere in tertiary education (Elsharnouby, 2015; Brook et al, 2014), teaching approaches and study content (Bovill et al, 2011). On school level co-creation regarding school atmosphere is mentioned by Hall (2017). Hakkarainen et al (2005, 2007, 2009) discuss an approach similar to co-creation calling it 'trialogical approach' at primary school level. Co-creation within the limitation of one subject being taught in higher secondary school is an area that has not been extensively researched. This thesis aims to provide an insight into the possibilities of applying co-creation in higher secondary level that is not limited to a certain area of classroom or educational practices but expands to as many aspects as possible connected with studying.

## **Background**

I work in Rocca al Mare School (RaM). It is a school providing education at both primary and secondary level covering the age groups of 7-19-year-olds with three branch schools (Roostiku school and Hispaania school providing primary and Vodja school basic education), pre-school study groups and kindergarten. The school was founded in 2000 as an initiative of a number of businesspeople and educational thinkers. When the school started there were 617 students and 50 full-time teaching positions. In the academic year 2018/2019 there are 890 students and 89 full-time teaching positions in the main school. The language of instruction is Estonian, and the school follows Estonian National Curriculum.

RaM is a private school that is owned by Rocca al Mare Kooli Aktsiaselts, a limited company. The shareholders elect a board that is responsible for employing the executive leader of RaM and overseeing the strategic development plans and financial issues, such as study fees and budget. The executive leader of RaM – the headmaster – is responsible for recruiting the staff and every day running of the school and its branches. The school has had its own building since year 2000 which was expanded in 2007, in Rocca al Mare, Tallinn.

I was recruited as a teacher of English to RaM in spring 2000. In addition to teaching English, I have also held various other positions in the school: administrator of study information system eKool, Head of English Department, academic secretary of teacher development centre RaM Seminar and for the last two years Head Teacher for Senior High School (classes 9 to 12). In addition to my work at school, I am also a Writing Examiner and exam item writer for National Examination in English and a Speaking Examiner for Cambridge Assessment upper level English exams Cambridge First and Cambridge Advanced (B2 and C1 levels correspondingly in the Common European Framework of Reference for Languages [CEFR].)

Over the years of teaching English at RaM both the language level and requirements for English skills have constantly been increasing. For the past four years, the majority of school-leavers in RaM opt for an internationally recognised language skills certificate rather than taking National Examination in English. There is a variety of international language examinations available that can be used to replace the national foreign language examination requirement depending on where the graduate wishes to continue their studies. This has also modified the way English is being taught at RaM. English is the first foreign language that students start learning in their first school year with two lessons a week in smaller study groups. Starting from the second year three language lessons a week are taught until the end

of basic school (year 9). In years 10-12 the students are taught a total of 8 courses of English with a course length of 35 lessons. International language coursebooks are used as study materials throughout the studies, supplemented with materials created by teachers themselves and those available in the Internet. A one-week language trip to an English-speaking country (currently to Brighton in England) forms a part of English-teaching curriculum in year 8, where students live with local host families and attend English course at a local language school. Generally, by the end of Year 9 RaM students have achieved the level of independent language user (at least B1 but usually B2 according to CEFR).

In the past few years the teachers of English at Rocca al Mare School have been experiencing a number of problems regarding the study materials available for use in higher secondary level (years 10-12). The internationally published coursebooks are targeted to a general audience and therefore do not always offer support for language learners with Estonian language background. What is more, since publishing is a time-consuming process, by the time the course materials reach the school, the texts can be outdated, and finally, the choice of content for the tasks may not be interesting for the learner. This being the case, the course books have been playing a secondary role to the materials compiled by teachers. As there is not much point in asking students to buy the study materials that are then seldom used, do not support the development of their language skills and may be outdated or boring a decision was taken to gradually replace coursebooks with materials compiled by teachers themselves in the higher secondary school, starting with year 10 in academic year 2018/2019 and gradually moving upwards. A meeting was organised where the study content was discussed with reference to National Curriculum of English and international examination requirements where the topics were divided between 8 courses, study content was agreed upon and courses curricula were designed. It was agreed that there would be two or three central topics each course would focus on with fixed grammar, writing and vocabulary areas to be studied by all English groups with one English teacher taking the responsibility for compiling these whereas reading, speaking and listening activities would be sourced by individual teachers themselves and shared with colleagues who would be free to decide whether to use those or not. Vocabulary tests would also be centrally created and run with all teachers providing suggestions and tasks, the tests being scheduled to take place during the same time for all students.

## LITERATURE REVIEW

Co-creation is a new and emerging field that has been studied in various fields. For the purposes of this research, co-creation in educational setting (schools, secondary education) was the main area under scrutiny. Dialogical approach and knowledge creation metaphor were included as these are directly linked to everyday practices in education and have been employed at secondary education level.

In the literature consulted, co-creation is treated as a phenomenon that is primarily and closely connected with the world of business, healthcare and industry, especially advertising and marketing where the topic has also been studied in some extent (Brook et al, 2014:190). In that walk of life, the main focus is on productivity and value that can be increased through the process of co-creation. In business, one possible definition for value co-creation is ‘the joint actions by a customer (or another beneficiary) and a service provider during their direct interactions’. (Grönroos, 2012:1520). Grönroos and Voima also consider co-creation as an interactional function (Grönroos & Voima, 2013:133). Both notions can be transferred to the educational setting, which also relies heavily on interaction and is by its nature an ongoing action series. Ind and Coates (2013:86) describe co-creation as a participative process where people and organizations together generate and develop meaning. Ehlen (2015:120) describes the different dimensions of co-creation, called mechanisms, collected into a co-creation wheel with 12 elements. Ehlen’s study focuses on the factors that make innovative teams successful and breaches the borders of business or ‘industry’, bringing also in government and education. The author describes his approach to co-creation using the definition given by Ind and Coates where aspects developed and generated include new products, processes or services (Ehlen, 2015: 113). In education context, new knowledge can be added to this list. Ehlen also points out that though the idea of co-creation has gained much popularity, transforming the concepts into reality has so far been posing difficulties in most areas apart from management and strategic planning. According to his research, co-creation has its roots in a variety of views and approaches, such as the participatory view of including the end-users in the development of a product, democratizing view provides a link with social innovation in governance, healthcare and education; and customer-firm view which has brought along a shift from product-centeredness to focussing on the needs of a customer. The author concludes by saying that co-creation is more than just a new theory, instead it can be viewed as a new paradigm supporting the approach to innovation in organisations. (Ehlen, 2015:114-115).

In the field of education, co-creation has mostly been researched within tertiary education (Bovill et al 2011, Blau & Shamir-Inbal 2017, Chemi & Krogh, 2017) or the attention has been focussed on an element of teaching and learning such as critical-thinking skills (Yeh 2012), assessment rubrics (Fraile, Panadero & Pardo, 2017), use of educational living labs in teacher training (Ley et al, 2018). The articles about co-creation in secondary education focus mostly on engaging learners in school governance and strategic planning matters (Hall, 2017).

Currently, there are many expectations to what schooling in the 21<sup>st</sup> century should be like that are emerging from policy makers, education specialists and business sector alike. Schools are expected to educate students in a wide spectrum of areas, starting from the traditional literacy and numeracy skills and ending with being proficient in handling digital technologies, information search and selection, and problem-solving abilities (Kimber & Wyatt-Smith, 2010:607). Kimber and Wyatt-Clarke (2010:614) point out that teachers are standing at a unique position where they are able to support the acquisition of work orchestration, quality assessment and negotiation skills that are vital for connecting, communicating, collaboration and creation in both real and virtual environments. Bovill et al (2011:135) support the inclusion of learners in creation of lesson content by referring to John Hattie's research which has shown that students make the most of learning when they are actively engaged in the process as teachers at their own right and when teachers learn from their students through different means, including feedback. Bovill et al describe higher education institutions enlisting their students as co-creators for curricula, teaching approaches and course design (2011:138-139) and conclude in their research that as a result of student involvement, students and academic staff started to perceive learning at meta-level, experienced an increase in involvement, motivation and enthusiasm and developed a collegiate relationship with both parties becoming genuinely interested in each other's practices and success.

Romero, Lafarriere and Power (2016) argue that learning does not occur itself in any setting and stress that in order for learning to occur, several aspects need to be considered among which one of many is ICT. The authors suggest, with the example of GeoGebra, that using dynamic environments help teachers both 'better assess learning achievement levels and develop new learning representations'. Romero and colleagues present five-level Passive-Participatory Model in their article that reflects the level of engagement a learner can experience with the inclusion of ICT. According to them, being in the position of a co-creator involves learners in identification, understanding and problem-solving processes. The authors stress that it is important to select educational uses of ICT as these can attribute to knowledge

co-creation processes on both cognitive and metacognitive level. Romero and colleagues advocate pedagogical use of ICT that effectively support ‘content creation, content co-creation and participatory co-creation of knowledge-oriented understanding and problem-solving’ and so also respond to the societal request for supporting lifelong learning. Furthermore, Blau & Shamir-Inbal (2017:78) claim that the use of digital technology in collaborative and co-creational tasks at tertiary level supports and enhances individual and collective learning and facilitates learning in different contexts. Hakkarainen (2009:214) states that technology improves learning through transformed social practices rather than technology-enhanced learning environments transforming educational practices by themselves in a miraculous way.

Hall (2017) suggests that at present learners at secondary level are mostly given a voice in formal circumstances, e.g. their contribution might be asked for a school development plan. Although there have been a number of strategies and initiatives to involve learners in different aspects (individual, collective and organisational), the main question is now posed as how to give authority to learners’ voice. There has been some research carried out in the field but according to the author ‘the majority of it is descriptive rather than evaluative and tends to focus on quality enhancement and assurance and staff or professional development’ (Hall, 2017:184). The author indicates the need of shifting away from the idea of learners as creators of feedback data only and involving them more directly as active participants in new knowledge construction. Waghid et al (2016:9) support this idea in their discussion of democratic education, stating that if teachers engage with learners on an equal footing, they will actively promote learner participation by acknowledging their right to contribute to learning. They then go on to discuss the role of educational technology in the light of democratic education principles influenced by Eamon Callann, Amy Gutmann and Maxine Greene’s notions of democratic education. According to Waghid et al, educational technology in a democratic setting enables the learners to both be included and excluded from pedagogical encounters according to their will, exposes them to both positive and negative experiences of belonging and deliberation and also helps them discover their potential and limitations.

Hakkarainen and Paavola in their research have been focusing on developing a tree-sided interaction between teachers, students and content (2005, 2007). They discuss three metaphors of learning:

- knowledge acquisition metaphor: knowledge is seen as something characteristic of an individual mind and focusing on internal information-processing (Sfard 1998 and Bereiter 2002 as cited in Hakkarainen and Paavola, 2007) and seen as monological approach to cognition (para 2);
- participation metaphor: studying learning as a growing-up and socialising process in order to function in accordance with community's socially negotiated norms (Hakkarainen and Paavola, 2007), considered to be dialogical view of human cognition processes (para 3);
- knowledge creation metaphor: the centre of attention is on how people develop collaboratively shared objects and artefacts, seen as a trialogical approach (Paavola and Hakkarainen, 2005:539). Table 1 from Hakkarainen and Paavola (2007) gives an overview of the typical characteristics of the above-mentioned learning metaphors.

Table 1. Typical characteristics of three learning metaphors

	Knowledge acquisition metaphor	Participation metaphor	Knowledge creation metaphor
Main focus	A process of adopting or constructing subject-matter knowledge and mental representations	A process of participating in social communities Enculturation, cognitive socialization	A process of creating norms, values, and identities and developing collaboratively new material and conceptual artefacts  Conscious knowledge advancement, discovery, and innovation
Theoretical foundations	Theories of knowledge structures and schemata  Individual expertise  Traditional cognitivist theories  Logically-oriented epistemology	Situated and distributed cognition  Communities of practice  Sociologically-oriented epistemology  Epistemology emphasizing dialogic interaction	Knowledge-creating organizations  Activity theory  Knowledge-building theory  Epistemology of mediation
Unit of analysis	Individuals	Groups, communities,	Individuals and groups creating

		networks, and cultures	mediating objects and artefacts within cultural settings
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Triological learning is characterized by six interrelated main features (Hakkarainen and Paavola, 2007, para 8):

- Shared objects of activity are developed collaboratively by advancing them. The objects of inquiry can be conceptual (plans, designs), real product prototypes or standard practices (e.g. lab procedures).
- The process of knowledge creation has to address both longitudinal knowledge transfer, and moments and short-term processes as knowledge creation itself is a discontinuous and non-linear process.
- Knowledge creation requires mediated interaction between individual and group activities to ensure knowledge advancement.
- Trialological learning involves sharing practices between educational, professional and research communities to promote investigative learning practices and engage learners from the very beginning of their studies.
- Trialological learning can happen only with engaging appropriate technologies enabling creating, sharing, elaborating and transforming knowledge artefacts.
- Trialological approach highlights the importance of interaction between various forms of knowledge, practices and conceptualisations.

Trialological approach has been put into practice by Hakkarainen and his colleagues at Laajasalo Elementary School, Helsinki, Finland. 31 pupils from Years 4 and 5 with their teachers participated in a 18-month long Artifact Project working in close cooperation with the researchers of trialological approach. The project linked the dimension of time (past, present and future) to a number of subject areas in the school curriculum (History, Science, Arts and Crafts, Materials Science, Design) inviting pupils to study the properties of artefacts from the past, explore the science aspect of their contemporary equivalents and develop the future versions of the objects under scrutiny.

Based on the literature review, co-creation can be seen as a universal approach that can be applied to a variety of domains, including education. It is curious to note that not much has been done in the field of co-creation in secondary school level, where students should already have the skill and study habits to work on lengthy group and individual projects. In this

research, the works of Hall and Hakkarainen carry particular weight in support of co-creation as a way to give students a chance to contribute to and shape their studies of English.

## METHOD

The aim of the research is to experiment with and analyse the possibilities of co-creation in a secondary school English language classroom setting. The current study is limited to one English group from a total of 84 students as the notion of teaching without a fixed set of study materials is currently being piloted with all students and English teachers of Year 10 with different possible approaches being tried out. The focus group consists of 16 students (9 male and 7 female), 16-17 years of age who are studying at a private secondary school in Estonia, Tallinn with the aim of achieving at least level C1 in English according to the descriptors provided in Common European Framework for languages by the end of Year 12. Their studies are based on the topic areas stated in Estonian National Curriculum but there is no fixed English coursebook set in use. Instead, Google Classroom (GC) was chosen by the teacher to be used as the primary platform for compiling study resources with contributions from both students and teacher and managing learning activities.

The topics for the English course are directly derived from Estonian National Curriculum of English for gymnasium level. The framework within language learning takes place is a fixed topic and grammar area according to the topics of the curriculum within what the teacher is free to choose the particular tasks to complete. In this case, the broad topic areas were filled with content from students. The topics covered during the academic year 2018/2019 are Education, Success, Society and Social Issues, and Technology and Innovation (Gümnaasiumi riiklik õppekava, 2011). The grammar areas to be covered are present, past and future tenses; for writing students are required to develop paragraph, essay and report writing skills. For each topic area the students have been invited to contribute materials that they have found relevant for the topic (articles, listening materials, videos, links with exercises, texts and speeches of their own, reviews of presentation software that would subsequently be used when presenting their work) as well as completing assignments developed centrally by all Year 10 English teachers for all the students in that year (mostly vocabulary tests). The research thus covers all four language skills: speaking, writing (productive skills), reading and listening (receptive skills) with an addition of specific grammar and vocabulary practice tasks. Table 2 shows how the development of different skills have been supported, students' input, and use of technology.

Table 2. Support for all language learning skills

Focus skill	Activities	Student input	Technology use
*grammar & vocabulary	<ul style="list-style-type: none"> <li>-Analysis of grammar specifications relevant to C1 level</li> <li>-Exercises on present, past and future tenses</li> <li>-Vocabulary identification and practice</li> <li>-Tests</li> </ul>	<ul style="list-style-type: none"> <li>-Choosing suitable exercises based on the criteria for C1 level practice tasks and sharing them with others</li> <li>-Compiling vocabulary lists for necessary language</li> </ul>	<ul style="list-style-type: none"> <li>-GC forum postings</li> <li>-Doing practice tasks online</li> <li>-Quizlet app for vocabulary practice</li> <li>-Using English Vocabulary Profile to identify the language level</li> </ul>
Reading	<ul style="list-style-type: none"> <li>-Reading materials in set topic areas</li> <li>-Reading texts created by other students in the group</li> </ul>	<ul style="list-style-type: none"> <li>-Suggestions of texts to read</li> <li>-Submitting their own texts</li> </ul>	<ul style="list-style-type: none"> <li>-GC forum postings</li> <li>-Uploads</li> </ul>
Listening	<ul style="list-style-type: none"> <li>-Listening to talks on set topic areas</li> <li>-Watching videos</li> </ul>	<ul style="list-style-type: none"> <li>-Suggesting videos to watch</li> <li>-Recording their own talks</li> </ul>	<ul style="list-style-type: none"> <li>-Links / files in GC</li> <li>-Following up the suggested materials</li> </ul>
Writing	<ul style="list-style-type: none"> <li>-Creating paragraphs and longer texts (essay, report)</li> <li>-Creating assessment rubrics for speaking and writing tasks</li> </ul>	<ul style="list-style-type: none"> <li>-Input for assessment rubrics</li> <li>-Written texts</li> </ul>	<ul style="list-style-type: none"> <li>-Textinspector for feedback on the level of writing</li> <li>-GC for submitting the tasks and sharing them with others</li> </ul>
Speaking	<ul style="list-style-type: none"> <li>-Giving talks on specified topics, both live and pre-recorded</li> </ul>	<ul style="list-style-type: none"> <li>-Reviews of presentation software</li> <li>-Students' talks</li> </ul>	<ul style="list-style-type: none"> <li>-Presentation software</li> <li>-Sound / video recording and editing</li> <li>-Task posting in GC</li> </ul>

The method chosen for the research is autoethnographic inquiry, supported with interviews and following the principles of action research. As Anderson (2006:375) points out autoethnographic approach enables researcher to study closely the areas with what the researcher has a substantial amount of self-identification. Cummingham and Jones (2005:2) point out that in autoethnographic research the work both presents a record of the research and the way the researcher makes sense of the record. This method has been used by educationalists to describe and analyse the matters connected with their work (e.g. Belbase, Luitel and Taylor, 2008). The chosen method enables me to reflect on the process and choices I have made, discuss the strengths and development points of the choices, bring in the students' opinions and perception. During the academic year I have kept a diary of all the activities related with Google Classroom. In order to perceive the students' ideas and opinions

semi-structured interviews were carried out in April 2019. The findings from both the teacher's diary and students' interviews are used to analyse co-creative approach to language learning and establish whether it can be regarded as a possible approach in higher secondary school.

## OVERVIEW OF INTERVENTION

The following chapter gives an overview of building a structure to manage and support the study process, and tasks tried out to increase co-creation in English lessons.

### Google Classroom

The need to have a framework for my Year 10 English class and students was strongly on my mind throughout summer 2018 as in spring the official decision had been taken not to use a fixed study set for the higher secondary school starting from the school year 2018/2019. I was weighing up the possible solutions for both organising and creating course materials with as little hassle as possible. Some of the materials were to be created centrally, as a collaboration of all Year 10 English teachers. Why then should not students have a say in what is being used in the lessons as well? There were two questions that I was looking for an answer for. First, how to be sure that all students have the study materials, these are not lost or easily mislaid, the materials and students' work is available for reference at any time during their higher secondary years and all materials are easily accessible? Second, what kind of tasks and activities could students contribute to, minimising the leading role of the teacher and fostering independent choice and responsibility-taking?

Thinking of these aspects I dismissed the idea of compiling a collection of worksheets or a booklet with study materials on paper at quite an early stage as these were the kind of materials that are the most easily lost, requiring frequent replacement, extra resources (usually paper and time for copying) and being frequently missed at the most inconvenient moment. Instead, I considered a possible digital solution. The options available in autumn 2018 were to create a course in Moodle, collect materials in a cloud-based file and folder storage environment, or use an environment designed for educational purposes.

I compiled a list of the needs as I was able to see them in autumn and considered each of the three options in accordance with the following list:

- The structure of submitting new topics, tasks, etc needs to be relatively flexible,
- Administration should be as easy and intuitive as possible while still making it possible to add documents, links, posts and collect assignments
- The wider the variety of materials that is allowed to be added, the better (file size and types)
- Adaptation of existing materials should be as easy and swift as possible

- Materials should be transferrable to a new Year 10 course in the next school year with a minimum of effort
- Students must have access to materials easily and from anywhere (not from a fixed location only)
- Students must be able to contribute (at least add comments, upload different types of files and links)

Contemplating the criteria, I excluded Moodle at quite an early stage. Although Moodle offers a variety of options that are good for managing and assessing students' work, I felt that the internal structure is not flexible enough to be experimenting with a totally new concept of studying. The possibility of creating a folder in a cloud environment meant that there would be an abundance of files there and unless a clear complex system of filing was introduced at once, managing everything might prove quite complicated. In addition, students would not be able to comment easily, as the comments would be attached to a document or have to be posted as a separate document, making it cumbersome to access and follow. Therefore, I felt I needed an environment designed for educational purposes. During the August session of MA Educational Technology, someone mentioned Google Classroom as a possibility for managing studying and since the school where I work also provided access to it, I decided to start developing my Year10 English classes using the platform. Students greeted the possibility with great enthusiasm, seeing such approach as both environmentally-friendly and easier for them to manage than carrying books and other materials round. All students also had a Gmail account which made signing up for the class extremely easy. An alternative would have been a school e-mail address for Google Classroom only (they could not have used this address for anything else) which might have caused problems with remembering the credentials.

I first decided to explore the possibilities of the environment one by one while getting my students also used to the new system. My students were very excited in the beginning of new school year (September 2018) about the fact that there as to be neither coursebook and workbook set nor huge amounts of printed worksheets. Rather, the main bulk of materials that they would need to refer to, would be made available through Google Classroom and the students expressing a wish to receive a paper copy, would be given one if available. In some instances, all the material would be web-based (exercises from the Internet, reading articles from web).

Within the first two months, the most basic functions were tested. Vocabulary lists with new vocabulary to be learned were uploaded, providing the same also on paper. While all students expressed a wish to get the first vocabulary list on paper, by the time the second list was available, only three students out of the 16 in the group still desired a paper copy. One of the reasons why the number fell so drastically was also one of the functions I discovered in Google Classroom which enabled linking Quizlet flashcards to the Google Classroom account, thus making it possible to access the vocabulary lists directly from the vocabulary learning app. Since then, no student has expressed a wish to receive vocabulary lists on paper. For practicing grammar, I designed a combined task of digital and paper-based approach. All grammar topics in Year 10 deal with the use of different tenses in English at advanced (C1) level. Therefore, I planned a three-step approach that has been used to study the present, past and future tenses:

1. Clarifying the criteria (what aspects of tenses usage should an advanced-level language user be able to distinguish within that particular aspect) that has been done as a class discussion or game and is based on information available in different grammar books (e.g. Destination C1/C2, Advanced English Grammar in Use, etc)
2. Students scour the Internet to find grammatical exercises on the particular aspect and posting their findings in Google Classroom forum for everyone to use. I would look through the links as they are submitted and comment on their suitability for the task's criteria
3. Students do the tasks submitted by their peers and I would also compile a handout on the same topic for further practice. This sequence usually ends with a grammar test – so far taken on paper.

Unfortunately, some students tend to treat the task of searching for links rather as a competition than an analytical task, so I am still tinkering with the exact task description and procedure for searching the web-based exercises to maximise the analytical aspect of it.

The third type of activities I started with in the very first months of using Google Classroom was writing assignments. Having discussed the aspects of writing good paragraphs in class with the help of a handout, I asked the students to create a text and upload it in Google Classroom as a not-assessed task as I wanted everybody to look at their peer's writing. Since I had set the task up as a non-graded assignment, I received information of submissions on my e-mail and was able to see who had submitted their task on time, who was late doing it and who did not do it at all. In addition, I discovered that I was able to add

comments both in the text (e.g. to point out problems with sentence structure, vocabulary, etc) and to the text in general (a summative comment). However, there were some matters that I had problems with – I was not able to share one student's writing with another person, so I chose to copy the text and post it to the other person's e-mail. This meant that I did not see what kind of suggestions and comments students were giving to each other. Since it was a test task, I took note of this and tried to keep that in mind when designing future writing tasks. The next writing assignment that I also graded, was commenting on three videos that students had watched about different school systems. The video links had been given via study information system eKool in the beginning of September, when Google Classroom had not been set up yet. Task description was posted in Google Classroom together with a deadline. When assigning the task, I noticed the possibility of dividing materials into different folders based on the topic I tagged the material with. This proved very handy, being a great help for sorting all the uploaded material. I have already had to revise the topics' names that I use for tagging, making them broader but this has fortunately had no effect on the availability of the materials. The biggest problem that surfaced with receiving assignments in Google Classroom rather than on paper is the fact that I have no reminder of the tasks waiting to be assessed and therefore forgot about them completely for quite some time. Later on, in the second half of the academic year I again had the same problem of forgetting to grade the assignments for a remarkable amount of time when the task was to write a letter of recommendation for a peer. Students receive a reminder about the approaching deadline, but I would also need a recurring reminder that I have a number of unassessed papers waiting for me in Google Classroom. When I eventually got to reading and grading the tasks, I noticed that by default, each assignment can be given up to 100 points, but I can change it until just before I start grading the writings.

After having tried out the basics, I decided to give students more leeway in choosing the study content and approaches themselves. When setting up the next topic I therefore first asked for their suggestions on audio-visual material on the topic and all the following tasks were built around the students' input. The overall focus within the topic was speaking and presentation skills, so the task was divided into two parts. The first part asked students to watch or listen to the material their peers had suggested for the topic, draw examples and ideas to support their own viewpoints and prepare to give a talk. The second part was looking up alternative presentation software to the ones they were familiar with (a query in Google Classroom forum indicated PowerPoint, Google Slides and Keynote), try it out in small

groups and give an overview of their findings to their classmates. The final step was to draw the different parts of the task together in the format of a talk on the topic, supported by a presentation designed using a new presentation software program. The task required notably higher level of independent working skills than some of the students were accustomed to but breaking it up into parts supported them enough for everyone to complete the task. I also decided to involve students in the assessment of the task, devising an assessment matrix and asking each of the students to grade their peers' talks. I was happy to note the interest such a combination task created among the students and because of the variety in input material the outcome was also varied and therefore more enjoyable than when it would have been if there had been only a set of source materials.

For the spring term, the student input has extended from suggesting a source to creating almost the entire content and assessment for the topic. This has enhanced student participation in both classroom and preparation work. Students have been asked to focus on an area within a broader topic, research it and cover their results in an article in the style of National Geographic with references to the sources used, and a speech that gives the gist and main points of their article. In addition, students have discussed and created assessment rubrics for both tasks and are currently working in pairs on analysing and assessing their peers work. The main problem that has arisen here is the issue of sharing materials within a class. I have recently discovered a Google Drive folder within Google Classroom that can be used for sharing materials with the students. However, to share the materials, there are two options: institutional access and individual access. Since I am using Google Classroom with a school account, I can grant group access only to users with the institutional username (the school e-mail address). Therefore, to share the folders with the articles and speeches with students, I had to grant each of the users individual access, which meant typing in everybody's e-mail addresses as sharing the link in the forum resulted in students still having to ask permission to access the files.

There is an option in Google Classroom that I have not tried out yet – tests (based on Google Forms). There might be other possibilities that I either am not aware of or have not noticed. Since I will continue to use Google Classroom with current students until they finish higher secondary school, it would be interesting to return to the current research at the time of their graduation in two years' time.

### **Students' interviews**

I conducted interviews with my Year 10 students to understand how they personally perceive the English classes in the academic year 2018/2019. First, students were informed about my intent and their parents were sent a consent form to approve of their child's attendance in the interview. The interviews were conducted in the first week of April, and the students were asked to reflect on the following questions:

- How much does learning English differ this year from your past year's study experience?
- What is your opinion of not using a coursebook in this year's English classes?
- How do you feel about being able to contribute to the content of classes?
- What is your opinion of the use of IT for studying English this year?
- How have you developed the skills of using digital tools yourself (and of your group members) while learning English this year?
- What could be changed to make learning English more useful and interesting for you?

The interviews were conducted in Estonian in order not to hinder free expression of students' ideas and make them apprehensive of having to speak in English to their English teacher while being recorded as well. There are 16 students in my group, out of which I was able to interview 14. There were four interview groups arranged over two days of English classes, the first two groups consisting of two girls and two boys, the third group consisting of one boy and two girls, and the fourth group consisting of two boys and a girl. The recordings of the interview were then selectively transcribed to be used as one of the sources for research.

As the English groups were re-formed in the beginning of year 10, there are only two students who have the same teacher as last year and one student who studied English with the same teacher a few years ago. Additionally, there are two students who joined the school in the beginning of Year 10. Therefore, there were several references to being taught by a different teacher. Comparing the previous English studies with the situation in Year 10, everyone agreed that the main difference was the expectation of independent work. Four students mentioned studying for the Basic School leaving exam as the focus of their previous studies and most agreed on the lessons having been more teacher-driven in their previous experience than in Year 10. One student said that the amount of freedom and independent work expected had come as a shock in for the first half of the academic year, having also a negative influence on test results, and three students expressed a wish for closer and more detailed guidance as they were not used to managing their studies themselves to such extent.

This was especially so during the first two terms (14 weeks) but has remained an issue for a few until now and I have been modifying the activities around grammar to provide more scaffolding for those students. Ten students pointed out that they enjoyed the balance of productive and receptive skills practised in lessons and felt that teacher was focussing on supporting their language skills with tasks that they might come up against in everyday life: *'Other groups are just learning the vocabulary by heart while we are discussion environmental issues and writing things that in reality will prove more useful in the long perspective than just studying the words for a test'* (interview 4). Six students agreed that learning English required more effort from their side than before, with one person from them remarking that for them lessons were not a strain but preparing for them needed more time and contribution.

The students universally agreed that not using a coursebook in their English studies was a positive aspect. Several respondents indicated that the books they had used during their previous studies had been heavy to carry and had not been utilised in full. Some interviewees indicated that at their language level a coursebook would not be necessary anymore and everyone mentioned internet as a good source for such information that needed to be referenced (e.g. grammar explanations, use of idiomatic language, etc). No student indicated the wish to have a book and workbook set for their studies as they did not see any added value in such arrangement.

Being able to contribute to the lesson content was generally considered positive, although some tasks were considered better than others. Students were more critical about the task format set up for practising grammar and expressed their approval about contributing to the class content by suggesting different reading and listening materials. A task that everybody commented on favourably was about success stories. One student also remarked on how the lessons began with an introductory phase, where five to ten-minute general discussion would set a friendly and open atmosphere for the class and create natural links to the lesson's main topics. Students appreciated the choice they were given within a broad topic and commented on the genuine interest they had experienced towards the material their group mates had suggested: *'You can see what other people are interested in and you get to know them better through that'* (interview 2) *'Everybody suggested things that were interesting in their opinion and you could choose between them. It was not so that everyone had the same three videos. Then you could choose between them and watch with interest, not just watch and long for it to*

*end. Watching videos was really useful as it was not predetermined, and you could recommend things yourself*” (Interview 1).

The use of Google Classroom was unanimously agreed to be a good choice of learning environment for storing the necessary study materials and submitting tasks. Students generally considered GC as good support for organising their learning activities, mentioning the deadline notifications they received in their e-mail before tasks were due, mentioning also the comfort of submitting assignments (‘*You do not have to send e-mails. There is no problem with the assignment not arriving or you not knowing what you are expected to do. You do not have to go through your handouts, mailboxes and eKool (a study information system) to find out what you have to do*’, interview 1) and user-friendliness of GC (‘*It’s simple. The task is there and then you do it and submit it*’ (interview 3). Opinions differed regarding the different study activities conducted via the means of GC. With regards to the support on learning and practising grammar, the task of submitting links the students had found themselves was the one to create the most controversy. Out of 14 interviewees, one made it very clear that the links their group mates had provided had not helped them at all because they preferred a different way of studying for test; one person said that they were selective about whose material to use, indicating that some students put more effort in choosing the material than others; one student indicated clearly that they had received much help from such tasks; and one student mentioned not being sure of the expectations to the task. Others interviewed did not indicate whether they considered the task beneficial or not. What was unvaryingly agreed though was the feeling that the task had turned from an analytical one into a competition, as ‘*There is a finite number of links you can choose from and submit and you just try to submit them as quickly as possible so that nobody will upload anything you have discovered before you.*’ (interview 2). The tasks that asked students to expand on their knowledge of presentation software and incorporate that experience into their own presentation were generally deemed as positive. Three students out of 14 mentioned having used the presentation program they had experimented for their English class also in other cases. Two students indicated that ‘*There’s a reason why we are using these programs – others do the same things but rather poorly.*’ (interview 4).

The general feeling about the development of digital skills in the English lessons also pinpointed the study into possible presentation software as the task that everyone attending the interview remembered and could comment on. One student remarked on the differences between operation systems (‘*At home I use Mac and in class I have to figure out how to insert*

'@' and how to write on school computers' (interview 1)) and another mentioned bypassing the limits set by school IT administrator (*I actually figured out how to save something on the desktop when you are not supposed to do that*, (interview 2)). When discussing digital competences in general, none of the students felt they had developed them when studying English because they were quite proficient already: *'In our school most of the young already can use the computer, they have taught themselves. It is difficult to learn something new. Things such as Excel and others that young people do not study themselves* (interview 4).

In order to improve students' experience of learning English the following suggestions were made:

- More content to classes
- More films, presentations, discussions, written assignments
- More scaffolding for study tasks, take topics into smaller pieces
- Having more rounds of class discussions and making everyone involved in them
- Working on the different registers of language (informal / formal)
- Support students' time management and planning processes
- Continuing the same way as the study process has been this year
- Continuing tailoring of study content to students' needs

## DISCUSSION

Co-creation in higher secondary level of education is an area that has not been widely studied. The topic has been researched more in the context of tertiary education. There are authors who mention aspects of co-creation in university and college level that can be transferred to secondary education – collaboratively designing assessment rubrics and thus achieving a better understanding of criteria and greater autonomy when assessing their work as suggested in Fraile, Panadero & Pardo (2017:70), giving students a voice and thus reducing the gap in power distribution between teachers and students (Waghid, 2016). Bovill et al establish that including tertiary level students in content creation fosters learner engagement and, as John Hattie's research has shown, maximises the effect of learning. Students at secondary level of education have been included in formal decision-making processes according to Hall (2017). The research into school context has been carried out by Hakkarainen and Paavola, involving learners at primary-level and testing their theory of trialogical approach. Elements from all these studies are reflected in the current research into co-creation possibilities in English classroom at higher secondary level. It can be said that when a framework is provided, it is possible to co-create most of the content necessary for English as a Foreign Language curriculum at higher secondary school.

The closest links with the research undertaken can be formed with trialogical approach. Although my teaching practice does not include all of the six elements described as the core topics in knowledge creation metaphor, the parallels are close enough for pointing out. In my research, knowledge creation took place through a collaborative effort and advancement of shared knowledge objects, similarly to the process identified by Hakkarainen & Paavola – in this case students and teacher in collaboration looking for and suggesting tasks for language practice, creating assessment rubrics and giving feedback to peers' work based on commonly agreed assessment tools. Co-creational tasks have immediate benefits to the study quality, making students assess the quality of their input and increase the effort they put in the work. After working on assessment rubrics one of the students remarked that '*Knowing the assessment criteria made me go through my assignment again and improve it considerably.*' Another similarity to knowledge creation's key features lies in the longitudinal aspect of the study process. In the case of this research, the study process has already lasted for one academic year and will continue for two more years, until the students graduate Year 12. Within that time frame the students will continue to co-create learning objects that foster development of their language skills and also support values education, advancement social skills and competences necessary for an active and responsible citizen. The main difference

with trialogical approach is the fact that during this research co-creation is held within the framework of a language class, therefore overlap with other areas may sometimes be restricted because of the requirements of the National Curriculum of English that takes precedence over . Although language learning enables the teacher and students to bring a vast variety of different topics and subjects into the classroom for exploration and discussion, the time limit of a fixed number of English classes, need to ensure that students progress in their language studies and also teacher's (possibly also students') limitations of expertise in certain areas (e.g. science in my case) do not always make it possible to create extensive cross-curricular projects similar to The Artefact Project carried out by Hakkarainen and Paavola.

Ehlen says that co-creation can be viewed as a new paradigm supporting the approach to innovation in organisations. (Ehlen, 2015:114-115). The route of teaching without a set of fixed study materials that I have been taking in the academic year of 2018/2019 has changed the way I used to teach. I have expanded the scope of language study by introducing co-creative projects that involve the students not only practising in language skills but also researching a subject in depth and trying out new ways of presentation. One of the examples would be researching the area of social issues, writing an article supported by references and recording a speech on the same topic. This involved the traditional language learning tasks of learning topic-based vocabulary, writing and speaking but also finding and working with scientific texts, citing them in one's writing and trying out sound / video recording software. Having to shape students' studies in close cooperation with them has also resulted in a more demanding approach, expecting students to actively participate and contribute in both material preparation and utilisation. Students themselves have also said that they find Year 10 far more demanding than their previous studies, one using the phrase '*It was a shock*' to describe the change they have had to adapt to. However, none of the 14 students interviewed expressed a wish for radical changes in the way the studies are arranged now or reverting back to the way lessons were conducted before. I believe this to be an indication of them actually finding co-creative approach more interesting and engaging and therefore also more useful. Had the approach been demotivating for them, they would have insisted on returning to the traditional way of studying, as that is something they are well-versed in and can easily gauge the amount of effort necessary for achieving desired results.

Kimber and Wyatt-Clarke (2010) express the opinion that teachers are able to support the acquisition those skills that are necessary for connecting, communicating, collaboration and creation in both real and virtual environments. Hakkarainen (2009) maintains that technology

transforms social practices related to learning, thus influencing both learning process and outcomes. In this research, Google Classroom was used as a tool for management, communication and co-creation. Students can find all necessary study materials there, it is where they share their suggestions and submit written assignments. It is the opinion of the teacher that is echoed in students' interviews that Google Classroom has given Year 10 English studies both the framework and flexibility necessary for co-creation to happen. As the interviewees stated, *'You know where everything is.'* *'You just open Google Classroom and it is there. You don't need to worry whether the e-mail went through or do you have all the necessary papers with you.'* *'Everything you need is in Google Classroom and you also get reminders of deadlines, so it is difficult to miss a deadline.'* *'You can go to Google Classroom anywhere, you don't have to have a book or a worksheet with you to complete the task.'* Having access to both study resources and peers' input fosters the learning process by providing reference points, suggesting alternatives (e.g. link banks for grammar practice) and scaffolding students' progression towards outcomes. A great advantage of using a learning platform, as students have seen it, is also the environment-friendliness aspect, decreasing the amount of copying and paper usage necessary for the lessons.

Co-creation offers the possibility of designing a course around the materials that are relevant at the time learning takes place. Having removed the set coursebook and workbook, there is now both the option and obligation to introduce texts, videos etc that stem from current issues and collective interest. Rather than following the set tasks, the study content becomes a matter of negotiation and suggestion both from teacher's and students' side. It is obviously possible to proclaim studying without coursebook materials but in reality continue relying heavily on input collected from them but if this be the case, it would be more comfortable to actually return to a fixed language course than try to deceive yourself as the students will not be deceived for long. An aspect that students found stimulating and engaging in this research was the fact that they were working with materials that had been suggested by their peers. In addition to such materials being meaningful to someone in their class it also gave them an insight into what is important to their peers, and thus forming invisible links in the Year 10 community. Realising what matters to a classmate and being able to link one person's contributions and opinions to other's has fostered cooperation and respect towards all the members of Year 10 learning community. Students have indicated that they appreciate the 'up-to-date' and 'real-life' activities co-creational tasks have set before them, mentioning that

*'Other groups are just learning the vocabulary by heart while we are discussing environmental issues and writing things that in reality will prove more useful in the long perspective than just studying the words for a test.'*

In a classroom that is using co-creation for study content, the roles of teacher and students gain an extra dimension - both become instructors. It is not only the teacher anymore who introduces topics and fosters learning, it is a shared responsibility with the teacher's role being shifted towards the role of a mediator or a mentor. Students become involved participants rather than an audience and because the content suggested by peers carries notions important for the learner at that point of time the lesson provides grounds for interaction for both during the class and also after the lesson has ended. Now the content really matters to the students and, if the teacher takes interest in one's students, it starts giving valuable insights into the world and ways of thinking of the young. Teacher's acceptance of what is important for the students also helps when less popular areas of study have to be tackled – students become more receptive to teacher's suggestions and plans. This results in their taking more interest also in less exciting activities (long complex projects, tests) which in turn brings along better study results and consolidates learning for a longer period of time.

There are a number of constraints to using co-creation in classroom at a large scale. Small co-creative tasks can be done at any lesson but extensive practice in English-language classroom requires learners to be fairly comfortable with working extensively in English, the group to be familiar with teamwork practices, the subject curriculum and the school to be flexible enough to arrange learning in a way different from the traditional approach and the teacher to be willing to experiment. During this research some aspects cropped up that posed difficulties to me as a teacher that would not have occurred in the traditional classroom. One of these was assessing students' written work- it is not easy to overlook a pile of papers on the desk but if they are in Google Classroom they are out of sight and therefore easier to forget, which happened several times. Another example would be sharing students' work with their peers. It is easy to distribute someone's work in a traditional class. In Google Classroom however, this involved distributing access permissions to folders and sending out invitations to students enrolled in the course as the students' usernames are not school e-mail addresses. Teachers interested in using co-creation in their courses also have to be ready to use technology, be willing to tinker and experiment with it as technology has a crucial role in fostering content advancement. It is possible to use co-creation in a small scale without bringing in much IT whereas while working on longitudinal projects, it is quite unlikely to

manage without using some technology, be it for looking up and sharing materials, managing the process or disseminating the results.

## CONCLUSION

The results of this research give an insight into the possibilities of using co-creation in studying English, a topic that has not been widely researched so far. The motivation behind the study was my personal need of finding a new approach to managing and designing English studies in the situation where the traditional approach was not available because of institutional decisions but official requirements to learning outcomes still had to be achieved. The thesis gives an overview of the solutions and activities used, reflects my experiences as a teacher and students' opinion in such situation.

The findings of the research suggest that co-creation increases student involvement in both preparational and classroom activities as they have a chance to express their preferences and put forward suggestions for study materials. Student-teacher roles obtain an extra dimension of collaboration as the role of instructor becomes shared among all the members of the study group. As a teacher I now have colleagues in my classroom and the traditionally one-way knowledge transfer from teacher to student becomes a truly two-way process where everybody is a learner and a teacher at the same time. Accepting students' input and building on it has given me valuable input to both what matters to my students and how they steer their study processes, thus enabling me to develop better-targeted tasks for honing my students' language skills. Doing so will undoubtedly mean increasing students' involvement to a higher level than has been described in this study but how to do that needs further consideration.

Using a study managing system (Google Classroom in this case) creates a framework that supports the process of input, sharing and working together on different study tasks and supportive materials (e.g. assessment rubrics, vocabulary lists, etc). At present, Google Classroom has proven a useful tool, but it is useful to keep an open mind towards other possible solutions. Exploring other platforms may also provide ideas for new approaches and types of tasks.

The study was limited to one school and one English language group because of the new approach to teaching English being implemented in steps and this year being the first year such approach was used in my school. The process will continue and every coming year when I have new Year 10 students, I am continuing hosting English classes based on co-creation and dialogical approach. I have shared my experience with other English teachers and succeeded in encouraging them to pick up different pieces from what I have been trying out. Some of them have started using some of the tasks, others have been trying out Google Classroom. I will also continue to keep notes on what I am doing and invite student feedback

to make sure their needs are being catered for, thus collecting raw data for possible future research.

The results of this study can be used to pursue further research in the area and identify additional areas of investigation. It is important to continue research in this area, by both increasing the number of study groups and length of time dedicated to exploring the field.

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**Author's declaration**

I hereby declare that I have written this thesis independently and that all contributions of other authors and supporters have been referenced. The thesis has been written in accordance with the requirements for graduation theses of the Institute of Education of the University of Tartu and is in compliance with good academic practices.

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