Turku University of Applied Sciences
Master, Culture & Arts, Leadership & Service Design
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Master's Thesis

Language in Motion:

Using Service Design to Create English Language Animation Workshops as an Educational Service for Basic Education in Turku

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Abstract

The aim of this thesis was to show that Service Design methods and tools could be used to create an educational service for Basic Education in Finland that teaches students how to make stop-motion animations using school tablets, laptops or desktop computers. The background for this thesis study is an interest in the learning of the English language and in the use of stop-motion animation as a learning tool.

The service concept is comprised of four basic principles: English language learning, Multidisciplinary learning (incorporating Content & Language-Integrated Learning), technology as a learning tool, and project-based learning. All work has been carried out under an ethos based on the principles of action research and prototyping and learning by doing, which also informs the ethos of the Animation Workshop lessons themselves.

The research questions are: How can The English Language Animation Workshop Service be developed and implemented using service design processes and methods? And: What are the challenges and other factors that need to be considered in *The Service*, and how can they be addressed?

The research and design work covered relevant theoretical subjects, and five distinct service design methods of both quantitative and qualitative nature were employed to research, design and produce a workshop service. The iterative nature of the service design method allowed for a process of constant research, design, implementation and testing, evaluation and re-testing through the activity of planning, doing and evaluating the sets of Animation Workshops.

During the case study phase of this work this service (referred to hereafter in this thesis as *The Service*) was employed by three schools in the City of Turku, delivering six sets of Animation Workshop lessons participated in by 198 students of grades one, three, seven, eight and nine of both Finnish and Dutch nationalities. This equates to 43 x 45 minute lessons, or 35 hours and 15 minutes of lesson time in the classroom.

The results were that in the case of grades 7, 8 and 9, the students used their English skills for communication and performing the tasks. The younger students, having little or no English language learning experience were under no obligation to work in English but did produce some of the target language, and were given their tasks in English. All students participated in the activity and produced animations; in many cases thematically linked to other subjects studied, for example history and art.

Through these Workshop lessons, several requirements and objectives of the National Core Curriculum for Basic Education, and those of teachers and local authority stakeholders were

fulfilled, as well as adhering to the interests, hopes and wishes of students.

The majority of students and teachers responded well to the project, and viewed it in a positive and valuable light. This study shows that Service Design methods and tools can be used to produce a viable educational service of real pedagogical value that can co-exist alongside and complement traditional learning methods.

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1. Introduction

The aim of this thesis study is to find out how service design processes and methodology can be used to develop an educational service for students in primary and secondary schools in the Turku Area. This will be referred to as *The Service* from this point onward. The function of The Service is to conduct a workshop activity during which students are shown how to make stop-motion animations using an app for a digital tablet or other computer.

The Service uses educational theories and methods in order to achieve the following goals:

- To give the best possible overall learning experience for the student

- To improve students' ability and confidence in using their English language communication skills

- To provide an activity that reflects recent reforms to the Finnish National Curriculum for Basic Education.

- To be a service that fulfils the objectives and requirements of all stakeholders.

- To give students an opportunity to do a novel and stimulating activity.

- To give students an opportunity to engage with new teaching methods.

Language

Students of grades 7, 8 and 9 who have English language learning experience are encouraged to use only English for all communication and work done, both spoken and written. The situation for younger students who have little or no English language learning experience is different. All instruction, guidance and other information given by the service provider and project leader is in English.

The Service has been designed and created to take advantage of project-based learning methods, so that students get to learn about the topic by directly participating in the activity rather than just be given a lecture or information to memorise and recall without a context.

There are other theories and concepts of learning that form the basis of these Animation Workshops. The reasons for the inclusion of all of these in *The Service* is something that will be explained in later chapters.

Why I Chose this Topic

In late December 2016 and early January 2017 I was discussing with a friend of mine, who is a secondary school English teacher in Turku, the possibility of doing some kind of activity workshop with her ninth grade class. I am a native English speaker and have a Bachelor's degree in Animation. Therefore it seemed logical that the workshop activity should somehow make use of these attributes and experience. This was to form the basis of a thought process that developed into the idea of making a project-based workshop that could be given as part of school English lessons.

Other Factors that Influenced the Project

Due to the fact that I am a native of Great Britain and before starting this work was not familiar with either the Finnish education system or with the teaching of English in Finland as a foreign language, some research into those subjects was required. This research serves as important background information and gives a context upon which I present this report, a study of how Service Design can be used to create an educational service for schools in the Basic Education system in Finland. A service that, it is hoped, is innovative, serves the needs of students, educators, parents and all stakeholders. Other objectives of *The Service* are that it fulfils all of its required functions and can be seen to be in line with the guidelines of local and national education authorities, and with the National Curriculum for Basic Education (NCCBE).

2. Research Process

Introduction

This chapter will firstly describe in more detail the aim of this thesis study, and secondly, look at the frame of reference which describes what this thesis covers, and therefore what will be studied within it. The third and last part of this chapter will show the research questions that have been chosen, and will describe the research and design methods used to answer them.

2.1 The Aim

The aim of this Thesis study is to find out how service design processes and methodology can be used to develop an educational service for students in primary and secondary schools in the Turku Area. *The Service* teaches students to use a stop-motion animation app installed on their school tablets or other computers in a project-based workshop structure that often takes place during an English lesson. *The Service* has been created to take advantage of a few different methods that bring innovation, enjoyment for the students and value into the learning process.

This thesis will show how *The Service* will be developed from the original idea and brief, based on the needs of the commissioners and other stakeholders and inspired by The NCCBE that was introduced between 2014 and 2016 in Finland. This thesis will examine the research that will take place, the use of service design methods and tools and the execution of the Animation Workshops themselves. The process of service design is one of continual development over subsequent iterations. In this project, six sets of Animation Workshops will be conducted in three schools in Turku. Each set of workshop sessions will serve as an iteration of *The Service*. Therefore it will be shown in this study how The Animation Workshop Service will continually be developed and improved over the course of subsequent iterations of animation workshops.

This thesis will look in detail at the use of the service design methods used, examine why they are chosen, how they are used, what the aim is in using them, and whether the chosen method works or not. The strengths and challenges that occur will be looked at, all of which in order to answer the research questions chosen for this thesis.
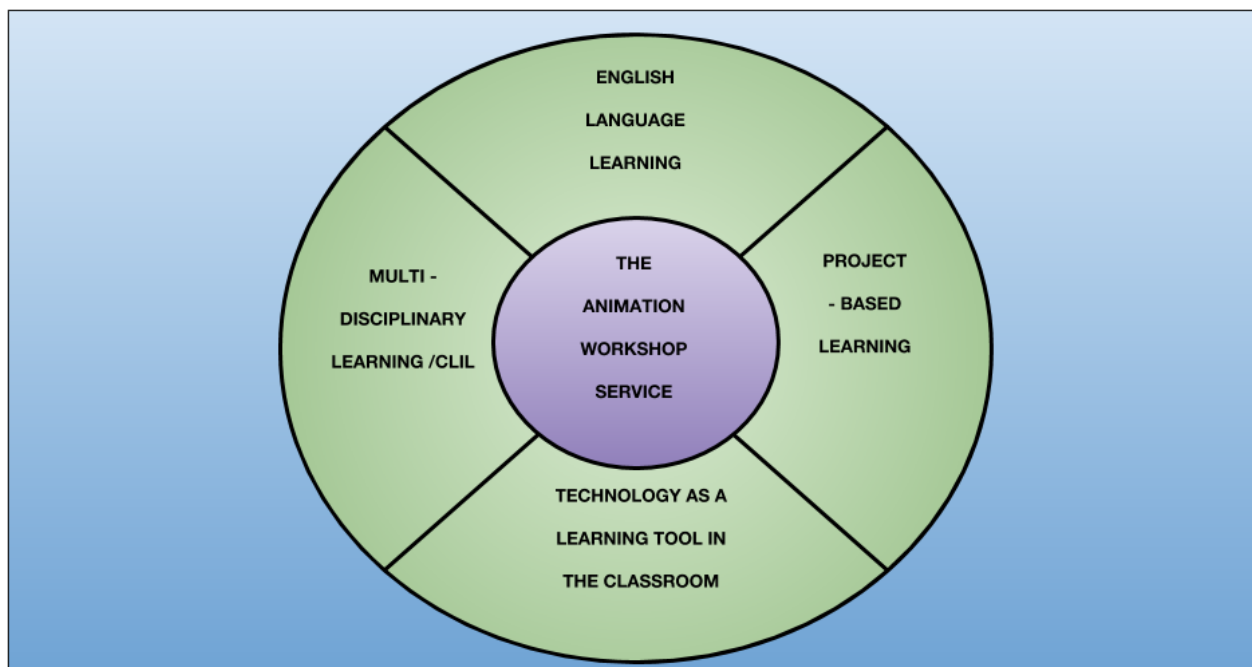
2.2 Frame of Reference

Fig 1. Framework of this Thesis Study.

The four main aspects that make up the framework of this thesis are:

- English language learning
- Multidisciplinary learning (incorporating Content and Language-Integrated Learning)
- Technology as a learning tool In the classroom

- Project-based learning

Explanation of the Four Constituent Aspects

What do each of these aspects mean, and why are they essential parts of *The Service*? What follows is a brief explanation of each of these four topics, and why they are included as central aspects of *The Service*.

English Language Learning

The teaching of linguistic skills is a component of an education in languages and a way to introduce students to and be aware of linguistics[...]students are emboldened to develop and use their communication skills in real situations (Finnish National Board Of Education, 2016, 375).

It is one of the core functions of *The Service*, that in addition to students learning to make stop-motion animations with a digital app, they also use their English language skills to communicate and to do all the tasks involved. Even though the workshops lessons are designed and executed in such a way that the use and practice of English language is incidental to the project, the function of English language learning is not to be underestimated. It is a vitally important part of *The Service*.

By having language learning as an incidental byproduct of the activities students undertake in the Animation Workshops, an extra purpose and extra value is given to *The Service* that goes beyond the creative benefits of animation making. It uses communication, the most vital skill one can learn, and fundamental to all other productive activities.

English Language Learning relates to the other three main aspects of the *The Service* because in addition to being one of the aims of *The Service*, communicating in English is the means by which the other aspects and functions of *The Service* are carried out. In a sense, communication in English is not only the means by which the language is practised and therefore incidentally learned, it is, as a means of communication, the framework by which all tasks and activities are carried out. By carrying out these activities, the other aspects (multidisciplinary learning, using technology as a tool in the classroom and project-based learning) are incorporated. Using those aspects in English is a key way in which the English language aspect of *The Service* unites the other three to make *The Service* a viable, useful and engaging prospect for Students, Teachers and other Stakeholders.

Multidisciplinary Learning (incorporating Content and Language-Integrated Learning)

Multidisciplinary learning is a term which means students can learn more than one discipline, skill or gain experience in more than one subject simultaneously. An example of this can be found in the kind of activities run by Kielikoulu ELF, which is a children's language school in Turku. In an interview given for this study on 18.02.2019, The director of Kielikoulu ELF, Elina Hallström

explained about a simple task-based activity that uses the principles of Multidisciplinary Learning:

"This week, on the camp that you're visiting, the theme is winter fun, and one of the projects we do for example is we learn about animal footprints in the snow. So they'll have pictures of different animals that live in Finland in the winter, and they'll have a picture of their footprints and they'll try to match them, then they'll get all the information. Then, once they've done that, we use shaving foam and glue, which they'll use to paint a patch of snow and make footprints on it. They're doing art, they're doing biology, they're doing it in English[…]so definitely it is multidisciplinary." (personal communication with Elina Hällström 18.02.2019, appendix 1.)

How Multidisciplinary learning is used in *The Service* is similar to this example. The Animation Workshops usually take place in English lessons on the school timetable, and English is spoken and used by the students (grades 7,8, 9). The main tasks focussed on however are those centered around the making of stop-motion animations with an iPad or other digital device. In this sense the students are studying a number of different topics simultaneously. By performing these tasks using English as the language of instruction and communication between all parties and in all forms (written, spoken and listening comprehension), not only are many disciplines practices at once, but the use of English, and the way that it is a means to an end and not an end in itself, also demonstrates the concept of incidental learning. As one Teacher was later to comment in a questionnaire given "the students are learning and they don't even realise it." (Teacher G 26.02.2018, appendix 8.)

To add to the multidisciplinary nature of the learning taking place, the themes of the animations that the students make can be related to a completely different subject. As an example, one of the Animation Workshops that occurred used the theme of the history of Finland's and The Netherlands' involvement in World War II, as the students had previously been studying that in their history classes, and the participants of this particular workshop were Finnish Students and their exchange counterparts from a school in The Netherlands. Therefore in this particular workshop, the following subjects or themes were studied either directly, indirectly, or had some other influence in the workshop: Animation, history, art and design, English language and technology in the classroom. In this regard, the ideas of multidisciplinary learning and incidental learning are very much an important factor in *The Service*, how it works, what it aims to achieve, and how it sets about doing that.

Content and Language-Integrated Learning is a method that is similar to multidisciplinary learning in the sense that an activity is carried out that teaches more than one subject at the same time. The difference being that multidisciplinary learning can be a combination of any subjects; whereas, as its name suggests, Content and Language-Integrated Learning relates specifically to the teaching of a foreign language through the teaching of another subject. For instance, instruction in a scientific subject would be carried out in a foreign language, imparting both knowledge of the science subject, but also pertinent vocabulary and abilities in that language.

(teachingenglish, 2019.)

The importance of this kind of learning is emphasised in The NCCBE, which talks about the need for developing transversal competence in students. Transversal competence means a collection of knowledge, values and skills and the ability to apply those in different situations. Know-how that transcends the borders between topics and unites different areas of knowledge and abilities is a prerequisite for a person's development in the worlds of learning, employment, and in behaviour in society at the present time and in times to come. (Finnish National Board of Education 2016, 21.) Multidisciplinary learning and incidental learning are activities that can help students to develop transversal competence. This is why these two topics are included in the framework of this Thesis Study.

Technology as a Learning Tool in the Classroom

Part of the day-to-day routine in Schools involves information and communications technology (ICT). A competence for the use and administration of ICT devices and their accompanying software applications is important for a young person's future development; both of its own merit and as part of the aim for multiliteracy in students. ICT is both a thing that is learned and a tool for learning. (Finnish National Board of Education 2016, 24; oph 2019.)

Because in order to make stop-motion animation some kind of image capture device and software are required, this makes the topic of technology as a learning tool in the classroom one of the four main aspects of *The Service*. It is important to note that the software app and the device in which it is used are means to the end of making animations in a project based way, not ends in themselves. ICT competence in Finnish Basic Education is taught both as a subject in itself and is also incorporated as a tool to help students acquire other competences. In a later chapter of this thesis it will be shown how this latter function of ICT - as a tool to help achieve other learning ends and not an end it itself - is a central tenet of the training in ICT given to teachers in Turku. Therefore it is fitting that the subject of ICT and its use as a learning aid in the classroom should be an aspect of The Animation Workshop Service, and therefore one of the aspects studied in this thesis.

An example of how technology as a learning tool goes hand in hand with the idea of multidisciplinary learning in *The Service* can be described as follows:
A tablet device is used to animate either two-dimensional drawings and other artwork, or three-dimensional models and artwork in order to tell a story about, for example, a historical subject that students have learned about in their History class. This is all done in English. Therefore, all the animation app controls and functions are in English. Students use their English skills while operating a tablet or laptop computer, a technological device fulfilling the function of a learning tool. The workshop lessons in which this all happens are structured as a multi-part project. Therefore, the inclusion of project-based learning as an aspect of the framework of *The Service* and this thesis will be looked at next.

Project-Based Learning

Project-based learning (PBL) is an educational technique that facilitates learning by centering it around the doing of tasks in a project framework. PBL handbooks used by educators describe the typical project as being elaborate sets of tasks that have as a basis problems or questions that challenge pupils and give them the possibility to work over a set timeframe in a way that displays autonomy and self-determination in the context of the tasks at hand. These tasks result in a tangible thing that is produced or presented. (Mergendoller and Thomas; Thomas 2000.)

The activities engaged in by students during the Animation Workshops centre around the making of short stop-motion animations using an iPad app. These tasks are the kinds of activities well suited to fulfilling the criteria as described by Mergendoller and Thomas.

An important objective of schooling is to provide a basis upon which the student can construct a wide-ranging set of abilities and knowledge and increase their outlook on the world (Finnish National Board of Education 2016, 22). As will be shown by this study, PBL can help achieve this objective and give students a valuable set of different experiences on which to draw in all manner of circumstances.

PBL can help build students' transversal competence and multiliteracy. Multiliteracy is the ability to make judgements, interpret and create based on various differing texts. In this situation the term text is defined broadly, and can mean information of various types; for example spoken, sonic, image-based, number-based and based on physical movement. (Finnish National Board of Education 2016, 20, 23.)

These pronouncements by the Finnish National Board of Education (more recently known as the Finnish National Agency for Education), further vindicate the inclusion of PBL as a central aspect of *The Service* and therefore, also as an aspect in the framework of this Thesis. This examination of PBL also serves to explain its compatibility with the other three main aspects of *The Service* as presented here.

2.3 Research Questions and Methods

In order to fully explore and find out how Service Design can be used to create a service such as that described, the research questions chosen are as follows:

1. **How can The English Language Animation Workshop Service be developed and implemented using service design processes and methods?**

2. **What are the challenges and other factors that need to be considered in The Service,**

and how can they be addressed?

Why the Research Questions were Chosen

Firstly, the research questions had to get right to the point of the project, which is to try to use Service Design methods and tools to create a service that provides the functions as previously described. Therefore,"How can this be done?" is the first logical question that this thesis project will try to answer.

Secondly, by trying to answer this first research question a set of Service Design processes, methods and tools will be used, which is a requirement for this master's degree study in Service Design. Additionally, the Service Design process is one of continuous development and evolution. This is a suitable way in which to create a set of project-based workshops that are repeated several times. This is therefore a good way to use the iterative nature of the Service Design process.

Research and Execution of the Project

The research part of this thesis will consist of research about various topics that it is believed will be of relevance. In this way the project is defined, and the framework of both the service and this thesis study is refined. This refinement is also a result of the way that the service will be created; using Service Design tools and methods, and the general approach to this, which is inspired by the ideas of Action Research and Action Prototyping (6.1)

Theoretical Research

In addition to the practical use of service design methods and tools, the four aspects shown in fig.1 were arrived at by doing background research into several theoretical topics that were seen to be of relevance to this project (5). This theoretical research has continued throughout the making of this project.

The Use of Service Design in this Project

In conjunction with the theoretical research, Service Design processes and methods will be used to help answer the research questions. *The Service* was built using Service Design. Both quantitative and qualitative research and design methods are used. All kinds of research into behaviours is an amalgamation of methods that are both quantitative and qualitative (Ridenour and Newman 2008, 9).

What is Service Design?

Service design is a set of ideas and methodologies that encompass a set of processes and tools for the creation of goods and services. There are many stages of the typical service design process, and many ways of customising and arranging these stages to suit the individual project, based on a variety of different factors such as real-life circumstances, practical logistics, desired

outcome and customer and other stakeholder needs. Service design is a multifaceted way of working that mixes utilities and ways of doing from fields that differ from each other. It is a way of considering a situation in a new way, rather than a new field of academia that stands apart. (Stickdorn 2013, 2.)

The various stages of a Service Design process can be (but are not limited to): Defining the need and context, initial research, design, testing, prototyping, producing, evaluating, re-testing, re-evaluating and implementing. Service Design is an iterative process, but what does that actually mean in practice when attempting to create a service?

Service Design is a way to create services that have value and innovation by using methods from the discipline of design. The perspective of the user is that which is worked from. In addition to the creation of new services, Service Design undertakings also try to improve the value of a service and the experience the user has when using it. (Rae 2013, 2.)
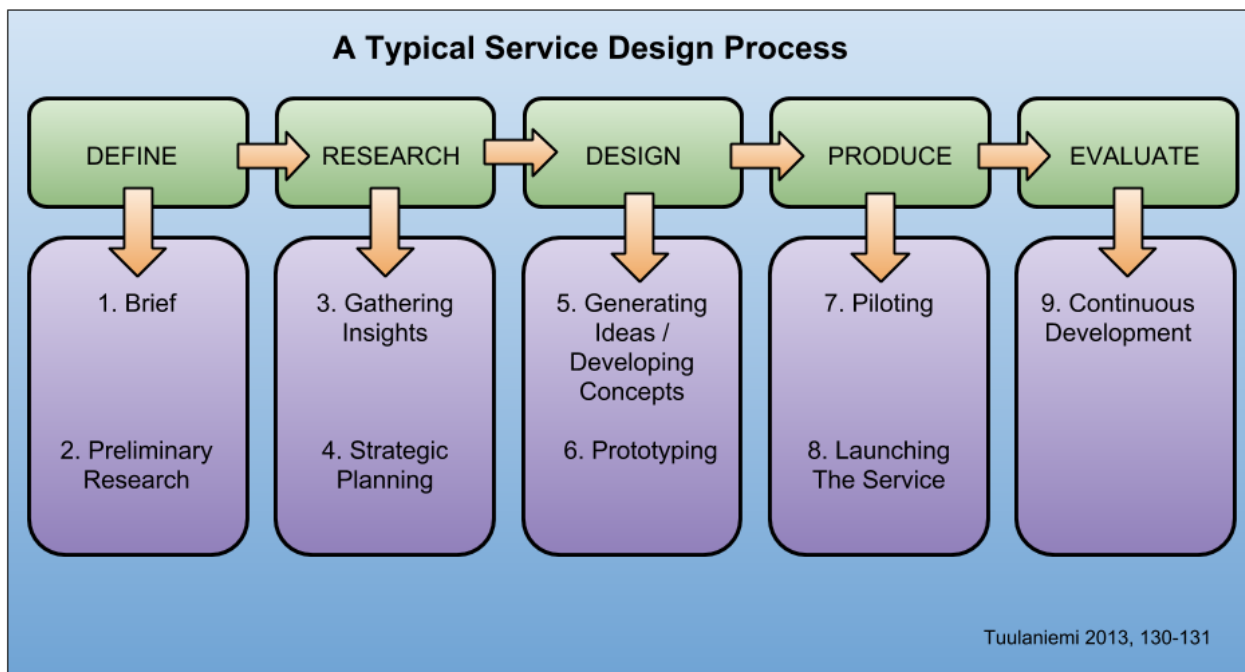
Fig 2. Tuulaniemi Model Of Service Design (Tuulaniemi 2013, 130-131).

Figure 2 shows a typical model of the Service Design process, and demonstrates what the main stages of the process are and how they can work.

Over the course of the project, *The Service* has evolved and grown, from an early idea that was acted upon straight away. Through that action it has progressed and been refined and re-refined. A service development of the kind undertaken and described in this thesis is a process of evolution and iteration, and this is why the methods and concepts of Service Design are well suited to this project.

The Service Design methods that will be used in the direct development of *The Service* are:

- Benchmarking
- A Co-Design Workshop
- End-User and Stakeholder Journey Maps
- Service Blueprint
- Student Questionnaires
- A Teacher Questionnaire

Process Chart
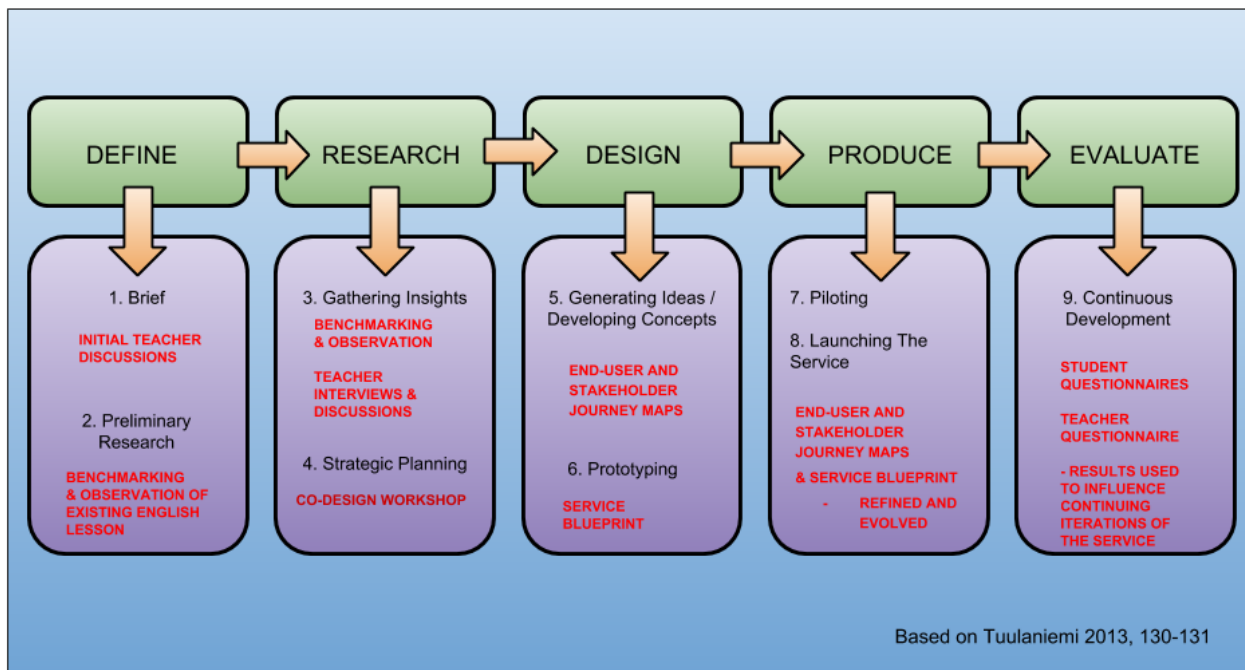
Fig 3. Process Chart (modified from Tuulaniemi 2013, 130-131).

This process chart shows under what heading in this interpretation of a service design process the various methods were used. Later, the methods used will be discussed individually and in greater detail (6).

3. Finnish Education System

Introduction

To put the development of *The Service* in context, this chapter will take a background look at the Basic Education system in Finland. The educational reforms that gave rise to The NCCBE

between 2014 and 2016 will also be described. The last part of this chapter will look at key aspects and objectives of the NCCBE with which the service is designed to be in harmony, and to fulfil.

3.1 Basic Education in Finland - an Overview

The public education system in Finland was established in the 1860's. It developed under the auspices of the National Board of Education, whose purpose was to organise and manage the Finnish school system. (finlandeducation; oph.)

The Basic Education Act 628/1998

In the year 1998 the basic education act 628/1998 was enacted (oph 2017). Some of the objectives of education as stated in the act are as follows:

- To support pupils' growth into humanity and into ethically responsible membership of society and to provide them with the knowledge and skills needed in life.

- Education shall be provided according to the pupil's age and capabilities and so as to promote healthy growth and development in the pupil.

- Those providing education shall cooperate with pupils' parents/carers.

- A curriculum shall be adopted by Education Providers for the education purposes described in the act.

- A basic education curriculum may contain vocational studies.
(oph 2017.)

These points represent important values that are evident in the way that basic education is organised at national and local level, how that is translated into national and local curricula, and how that is interpreted by schools in their syllabi, and by teachers and other stakeholders as they translate those values and aspirations through the curriculum to the student at a classroom level.

How Basic Education in Finland is Organised

Currently, Basic Education is a nine-year programme of compulsory comprehensive state education that pupils participate in between the ages of seven and sixteen. Pupils of grade one are on average seven years old, and this continues on through the grades so that so that ninth grade pupils are between fifteen and sixteen years old. (oph 2017.)

Educational Stage	Grade	Typical Age of Student
Comprehensive Basic Education	1	7 - 8
	2	8 - 9
	3	9 - 10
	4	10 - 11
	5	11 - 12
	6	12 - 13
	7	13 - 14
	8	14 - 15
	9	15 - 16

Fig 4. Grades And Ages Of Pupils In Basic Education in Finland (modified from stat. 2005)

Studies Into Basic Education and Basic Education Reform 2014 - 2016

Education is always the subject of change as different studies and research are carried out. Therefore it is inappropriate to go too deeply into specific current details, as what current information is presented here could be out of date in a year or two as more research and developments are made. However, as a background to the education reforms which brought about the National Core Curriculum for Basic Education (NCCBE), it is useful to know about important research and developments carried out in the recent past.

The VOSE Study Into Qualitative Anticipation

Between 2008 and 2012 a research project was carried out by the Finnish National Agency for Education (FNAE) whose purpose was to create a prototype system by which the skills and vocational competences needed in the future (about ten to fifteen years ahead) could be anticipated. It is hoped that the resultant data produced through the system could help various different areas of education, and that it could, to use one example, be used when planning and creating educational content and in curriculum development, including the National Core Curriculum. (oph 2012.)

The OECD and PISA

Evidence of educational successes in Finnish schools is also garnering attention on the international stage. On several occasions Finland has placed highly in the reports published by the Organisation for Economic Co-Operation and Development's (OECD) Programme for

International Student Assessment (PISA). The reports were started in 1997 and appraise the competence of 15 year old students in mathematics, reading and science. It also looks at what kinds of things students are able to achieve with that resultant knowledge. The next PISA assessment will be in 2021. (oph; oecd/pisa 2018.)

OECD and Education at a Glance 2018

As well as the PISA report, the OECD also publishes a yearly report on education in countries all over the globe called Education At A Glance (oecd 2018). Excerpts of the 2018 report in relation to the state of education in Finland included the following findings:

- In Finland there is more advancement in people's educational lives than in other parts of the world, but there still exists some disparity between males and females in terms of achievement in education and in the resultant effects to the job market.
- From 2005 to 2015 in Finland there was an increase in the amount of students entering the education system for young learners; however, the amount of enrollment is less than some of the other OECD nations in terms of the same age group.
- The numbers of students entering the upper section of secondary education is large and not unstable. In addition, the number of students going into schooling of a vocational nature is among the largest in the whole grouping of the OECD.

(oecd 2018.)

Why There was Felt to be a Need for Reform of the National Curriculum

On 13th June 2014 a video presentation was published on the webseíte of the Finnish National Agency for Education (FNAE, then called the Finnish National Board of Education) in which Irmeli Halinen, head of curriculum development gave a talk about the reform of the NCCBE. Among the points raised she explained that:

- The restructuring the curriculum at national and local level represents a chance to address shifts that are occurring across the globe and to revise and adjust educational establishments and the giving of education
- Starting at the beginning of the 21st century, significant changes have occurred which have affected the situation in which schools are working, which have made the effects of globalisation and the problems of sustainability in coming years more pronounced.

(oph 2014.)

3.2 The National Core Curriculum for Basic Education (NCCBE)

The FNAE describes the New National Curriculum and its implementation in the following way: As of August 2016 the newly reformed core curriculum was introduced for grades one to six, and more grades of students began the new curriculum subsequent to that. This introduction concludes in August 2019 when students of grade 9 will start to learn under the guidelines of The New NCCBE. (oph.)

Other key facts and aims of the key aims of the reforms, as spelled out by Irmeli Halinen in a 2015 article were:

- The National Core Curricula were compiled by FNAE in collaboration with all stakeholders; municipalities, schools, teachers, trainers and researchers
- Due to a large amount of local autonomy in education provision, municipalities may implement the curricula in their own way
- Emphasis is put on the idea of schools as learning communities
- Emphasis is put on the joy of learning
- Emphasis is put on encouraging an atmosphere of collaboration
- School subjects still have an important role to play in teaching and learning
- Much focus to be put on Transversal Competences

(oph 2015.)

Transversal Competences were emphasised strongly by Halinen (oph 2014).
The core curricula for school subjects have been written so that their learning objectives include the seven learning goals of Transversal Competence. As illustrated in figure 6, below, those goals are:

- Thinking and learning to learn
- Cultural competence, interaction and self-expression
- Taking care of oneself and managing daily life
- Multiliteracy
- ICT Competence
- Working life competence and entrepreneurship
- Participation, involvement and building a sustainable future

(oph 2014.)

These seven goals have also been an influence on the development of The Animation Workshop Service. It has been attempted to take into account some of these aspects when developing *The Service*.
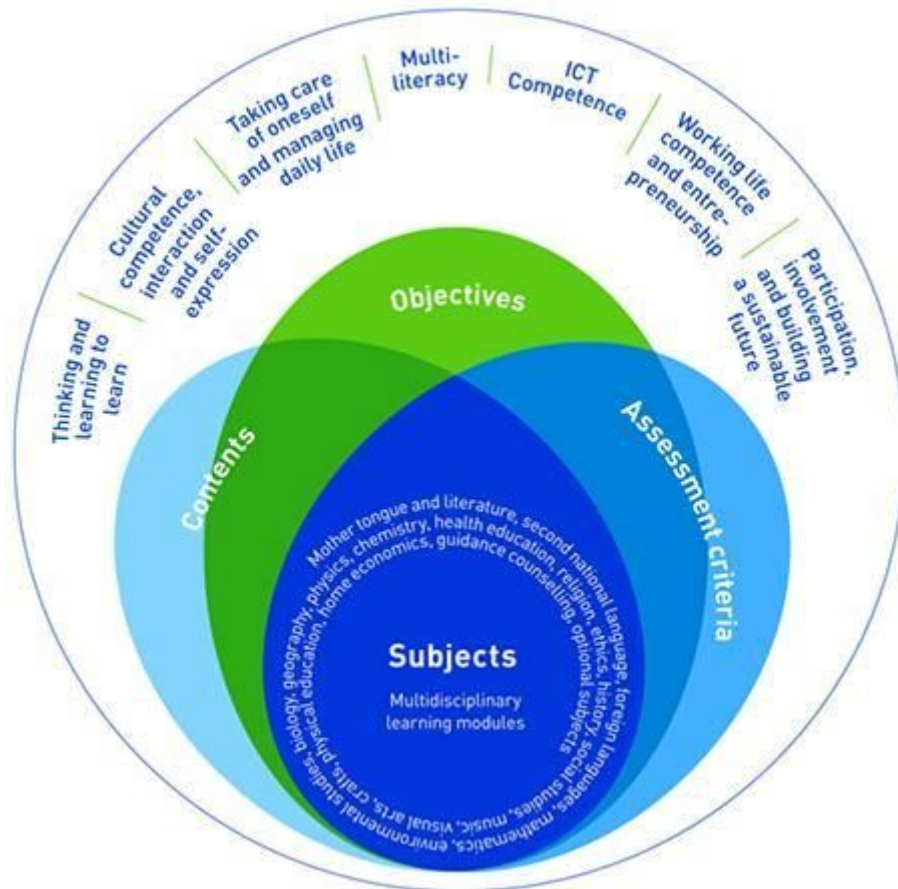
Fig 5. Transversal Competence as Promoted by the Finnish National Agency for Education (oph 2014).

Other Key Concepts in the NCCBE

The National Core Curriculum rests on a conception of learning where pupils are active. They learn to set goals and solve problems both individually and in groups. Language, physical elements and the use of different senses are crucial for learning and thinking. The core curriculum suggests that learning together promotes the pupils' skills in creative and critical thinking and problem solving, as well as their ability to understand different viewpoints (Finnish national board of education 2016, 17). These are concepts that have been kept in mind when creating *The Service*.

The NCCBE is followed by all Finnish schools, and includes all the core contents of different subjects and objectives. Based on these guidelines, local curricula are drawn up by the individual schools concerned and the local authorities responsible for education provision. (oph 2018.) In the case of this thesis study, that local authority is Turku City Education Division.

A major source of information used when making this research project and at all stages of the Service Design process that resulted in *The Service* itself is the document known as The Finnish National Curriculum for Basic Education 2014. Some of the important issues covered in this

study, and those techniques and concepts that *The Service* aims to use are referenced in this document. It will therefore be referred to frequently in this study, for its ideas and principles form a tangible guide that is valuable when making a research project such as this, and when creating a service based on those guiding principles.
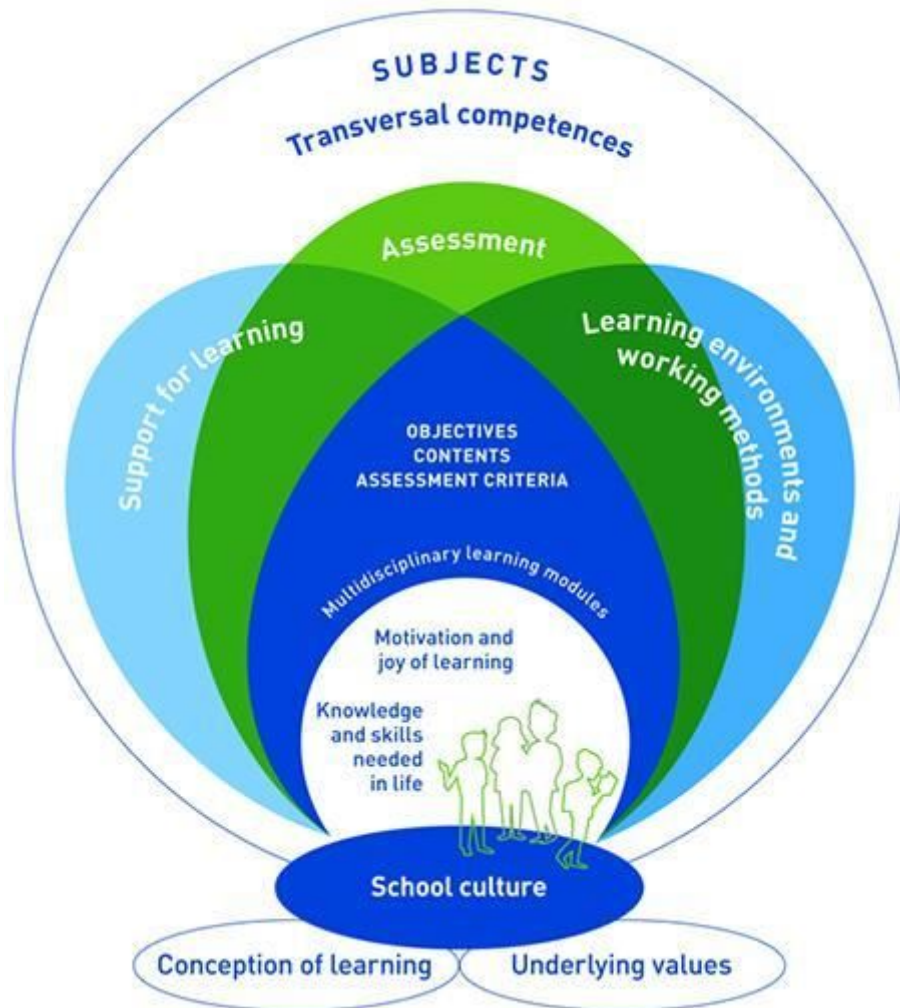
Fig 6. The National Core Curriculum for Basic Education in Finland (oph 2014).

3.2.1 English Language Learning and Foreign Language Learning in General in the New Curriculum

The NCCBE has a core belief that language is vital to learning, the acquisition of knowledge and the development of cognitive and communicative skills. This attitude extends beyond the official national languages of Finnish and Swedish and is also adopted in regard to foreign languages. In this thesis, English shall be the foreign language that is focussed on. The other principles that shape the NCCBE's guidelines towards the teaching of foreign languages are:

- The curriculum encourages the students' interestedness in the distinctiveness of culture and language in the school environment and in the wider community outside of the school.
- The curriculum encourages students to use their communication skills in bonafide

situations.
- Language studies help to make students ready for work that is methodical and that exercises their creativity in various kinds of groupings.
- Language tuition also helps students develop an aptitude for being actively involved and to take part in learning activities.
- Language learning intensifies students' self-belief in their aptitude for language learning and use.
- Multiliteracy skills are developed and the discussion of many different texts is undertaken.

(Finnish National Board of Education 2016, 375.)

Guidelines for English Language Learning in Grades 7-9

The following key objectives are laid out regarding English language learning in the NCCBE
- Students are emboldened to utilise the English language in various kinds of knowledge gathering and inter-communication activities
- The aim of English language teaching is to aid the student in building upon the skills gained in grades three to six, and to develop their aptitude for language-based hypothesis-making
- The aim of English language teaching is to advocate language-acquiring abilities.

(Finnish National Board of Education 2016, 375.)

More and more often, a lot of students are using the English language in their time spent away from school. These language skills gained through learning informally are things that are taken into consideration when teaching is being devised and when curriculum content is being chosen. (Finnish National Board of Education 2016, 375.) These are all ideals that *The Service* tries to uphold and encourage, with its emphasis on the project-based activity of making animation as a "vehicle" for the English language being used.

3.2.2 Curriculum reform at a local level in Turku

According to Salla Sissonen, the Pedagogical Designer of the basic education department at the City of Turku, the National Core Curriculum is the basis for the local curriculum design. When education policy is designed, a significant number of teachers, principals, students and their stakeholders are consulted. That is of utmost significance. Before the local curriculum was designed, each student in the city gave their input. The curriculum was then put together by a group of more than 100 teachers and principals. All schools and teachers in Finland follow the same instructions, due to the standardised nature of the core curriculum. Each school is able to add their own adaptations to the local curriculum, as much as it is allowed in the national or city guidelines. In Turku, some schools such as Puolala, Vähä-Heikkilä and Luostarivuori offer specialised bilingual education, which is also specified in the curricula. There are several projects and initiatives that have their own agendas, but all teaching and syllabi follow the national core curriculum. (Personal communication with Salla Sissonen, 20.10.2017.)

4. Definition of The Service

In this chapter The Animation Workshop Service will be described. How it came into being, the ideological context in which it was created and in which it exists, its aims, and how it functions in order to achieve those aims. The first part of this chapter will explain what the need for *The Service* is and why, and the circumstances that surrounded the commissioning of *The Service* and the brief that was set will then be described. The second part of this chapter will Describe what happens at all stages of *The Service*. This will include everything that happens before, during and after the Animation Workshops take place. The last part of this chapter concerns all of the actors who play a part in *The Service*; who the various participants and other stakeholders in *The Service* are, and what they all do at all stages of the service period.

4.1 The Need for The Service, Commission and Brief

It has been shown that, according to the NCCBE, there are many Finnish students who use the English language outside of school and who learn English informally. This echoes an interest in English language and culture that can be seen in everyday life in Finland. For example, English language films and television programmes are shown in Finland and are not dubbed into Finnish. English language music is also popular and has been broadcast on Finnish radio and television for many years. The ubiquity of online entertainment and other media that use English is also evidence of this. There is also a feeling that in some areas of life, the widespread popularity of The English Language, particularly among Finnish young people is increasing. In various contexts of a social nature, The English language has a number of differing representations and ways in which it is utilised; for example, in the media, in professional domains and in the world of Education. (Leppänen 2007, 149.) Therefore it can be said that the English Language has a certain amount of significance with some Finnish people within certain demographics.

More Evidence of There Being a Need for *The Service*

Presented here are some examples of initiatives that already exist in the Finnish school system and which fulfil the kinds of objectives described by the NCCBE; objectives which are also shared by Educators, Students, Parents and other stakeholders alike.

Kieliluokat

Kieliluokat means "language classes" in Finnish, and is the name of an initiative organised by the education authority of the City of Turku and has been running since 1990 (in the case of the use of English language). Kieliluokat runs Content & Language-Integrated Learning (CLIL) classes in five schools in the Turku area in the case of English (other languages used in some classes include Russian, German French and Swedish). Classes are taught in both the guest language and the native language, Finnish. (blog.edu.turku.fi/kieliluokat/.)

One of the schools involved in the Kieliluokat scheme is Puolala School, which is also one of the schools in which The Animation Workshop Service has been carried out. The classes who participated were made up of eighth grade students (Chapter 6.2).

The existence of Kieliluokat shows a link between *The Service* and another existing project that uses one of the guiding principles on which *The Service* is founded; in this case, CLIL.

As an example of Kieliluokat's objectives for its English teaching methodologies, those aims practiced at Puolala Schools for students of grades seven to nine are:

- That language retains its place in secondary education as a mechanism by which to teach
- That the aim in the secondary grades is to reinforce and continue the development of English proficiency that was attained in the primary grades
- In the following subjects English is used:
  - Social studies
  - Health education
  - Physics
  - Biology
  - Chemistry
  - History
  - Geography
  - Mathematics

(kieliluokat.)

In the Kieliluokat scheme, the amount of Finnish language used in school tuition is increased so that students gain the competency needed in order to progress to university / college or similar. (kieliluokat.)

The fact that Kieliluokat advocates the teaching of subjects other than English using English as the language of instruction is just one piece of evidence for a belief in that method, and a need for other projects that use these methods. The elements of the CLIL approach are just one factor of *The Service*, as has been previously shown.

Turun Kielivirta

Turun Kielivirta ("Turku's Language Power" in Finnish) is an organisation for the advancement and expansion of language tuition in the Turku area. It is organised and run by language Teachers in the Turku, Raisio and Naantali areas and supported by the Finnish National Agency for Education and by Turku City Education Division. Among its aims are the objectives to make students' foreign language learning activities better, and it gives help with the coaching of language teachers and the growing of their groups of contacts. (turku.fi/kielivirta.)

Their work represents more evidence that there is a need in Turku Schools for a workshop activity that has a language teaching element. The main reason for this is because Turun Kielivirta has in

the past provided similar workshops to classes in participating schools. Similar in the sense that they involve a professional person of a nationality other than Finnish coming into the classes and leading students in all manner of project based workshop activities, often using either their native language (if it is not English) or English, and introducing elements of their native culture. Past examples of these workshop-style activities have included a Christmas themed workshop in which an American caterer and native English speaker led a class of upper secondary students in the making of Snowman-shaped marshmallow treats, visits by a Japanese person who held an origami workshop and a tea ceremony, a Swiss visitor who made fondue with the students, and an Italian chef who led a pizza-making activity. (turku.fi/kielivirta.)

The Commissioning of *The Service* and the Brief

In January of 2017 The Service Provider (the author) met with the teacher with whom the original discussion had occurred from which the idea for the Animation Workshop first came about, Teacher A (all teachers involved in the workshops documented in this work have been codenamed in order to maintain impartiality and as a matter of professional courtesy).

Objectives of The Commission and Brief

In relation to this work, "commission" means the giving of the task of creating and executing *The Service*, and "the brief" is the set of specific details about how the task should be carried out, the objectives and goals of *The Service*.

Suggestions About a Workshop - Style Activity

The existence of workshop-style activities such as those provided under the auspices of Turun Kielivirta is one piece of proof that there is a need for these kinds of project-based activities in the Finnish Basic Education System. Therefore, at the initial discussion with Teacher A, where the possibility of a workshop-style activity with students was first introduced, the work of Kielivirta was also discussed as an example of these kinds of activities having already occurred with classes at Teacher A's school, Luostarivuori. This was a major factor in the commissioning of *The Service*, and helped Teacher A and The Service Provider to formulate, co-design and plan the Animation Workshop lessons.

The following needs were identified. It was decided that The Animation Workshop should:

- Teach students how to make stop-motion animations on an iPad
- Get students to work and communicate in English
- Encourage teamwork
- Encourage creativity
- Engage students in a project-based activity that has specific goals and a concrete

outcome

● Provide a different kind of learning experience than a standard school English lesson

4.2 Description of The Service

Among the participants and stakeholders in *The Service*, the three categories of participants who play the most active role are the Students for whom the Workshops are designed, and who participate in the workshops lessons, the Teachers in whose lessons the workshops occur and the Project Leader who presents the Workshops, and with whom the Workshops are co-designed with the Teachers. The roles of these three actors and those of all stakeholders will be examined more closely in the last part of this chapter, which deals with the stakeholders.

Pre-Service

The Project Leader (AKA Project Facilitator) meets with the Teacher in whose classes the Workshops will be held. They discuss the themes of the lesson, if there is one. There need not always be a theme on which Students are basing the stories told in their animations. The finer details of what the Teacher wants to achieve are discussed and a lesson plan agreed upon. The amount of lessons provided will also be discussed and agreed upon. This can vary; the workshops in this project have been from between three to six sessions long. A normal school lesson is 45 minutes in duration.

After meeting with the teacher the project leader will then design lesson content based on the meeting with the teacher. For the first workshop with Luostarivuori School this content consisted of a presentation that introduced the topic of stop-motion animation, gave a little background information about different types of stop-motion, a brief overview of the process; from initial idea and storyboard, to the controls of the iPad app, animating and soundtrack making, and finally saving and exporting the finished files. The Project Leader is then in further contact with the teacher(s) to approve or finalise and make adjustments to the lesson plan. The workshop lesson times and which classroom is to be used are then finalised.

During *The Service*

The key activities of the Workshop lessons are as follows. In this hypothetical example the Workshop described takes place over six lessons.

● The Teachers settle the students down. They are asked to sit with their chosen partner, and The topic and Project leader are introduced
● The class watches a presentation about the subject and the tasks are introduced
● The students, in their groups / pairs, come up with an idea for their animation. They discuss and make a simple list of events, paying attention to the idea of a beginning, a middle and an end.
● They plan out their simple story bit by bit, making a rough storyboard to show what happens at every stage of the story

- Each group / pair of students is given an iPad and the Project Leader presents to the whole class about how to open the animation app and get started using it.
- Students start experimenting with the app and animating their story

In the case of most of the Workshops given, these steps take up the first forty-five minute lesson. At the end of the first lesson students will save their work and a note will be made of which pairs / groups used which ipads, so that they can continue where they left off making their animations in the next and subsequent workshop lessons.

Over the course of the remaining workshop lessons in the "during-service" phase, the following key stages, or "touchpoints" will occur:

- Students continue with the animation process, during which (and at all other times) the Teacher(s) and project leader monitor their progress, assisting by answering any questions or offering advice as and when needed. The Teachers also perform the normal teacher functions of keeping any students who need it on track and dealing with any discipline issues that may occur.
- When they have finished animating their stories, students record a simple dialogue and sound track onto their animation's timeline using the built in record function. This function features a multi-track feature, allowing Students to build up their soundtrack in more than one "pass". It also allows the addition of sound effects from a small library included in the app. It is hoped that students speak as much dialogue as possible (in English, naturally) in order to add this as another way in which they have used their English skills in the workshop.
- If there is time, Students may also wish to add a simple titles page to their animation. Again, the app includes this feature. This provides another opportunity to use their English skills in a different way.
- The last part of the process of the making of their animations concerns the students saving their work locally to the ipad, and exporting it to either the school's cloud storage drive or to the teacher's work email address.

- Usually the very last part of an animation workshop lesson will involve a review and appraisal activity, during which the finished animations will be watched by the whole class, and the students encouraged to say something about their work. In all cases, the finished animations were compiled by the project leader in his own time into a short programme which featured a title and end page introducing the class' work and thanking the Students for their hard work. The title of each animation would be added at the start of each piece of work, making the individual works easy to differentiate, and providing a little bit of a finishing touch to the overall programme of animations.
- The last piece of business to occur in the Workshops is that the students are given a questionnaire to complete. This not only gives the Project Leader valuable information about the students engagement with the project, but helps when designing subsequent

workshops (6.1.5)

Use of the English Language During the Workshop Lessons

During the workshops, English is the primary language used by the Project Leader and Teachers. Workshops were held with two main user-groups of Students; those of grades seven, eight and nine, and those of grades one and three. In the case of the seventh, eighth and ninth grade Workshops, Students were encouraged to use their English skills for communicating, learning and completing the workshop tasks. The First and Third grade Students were not obligated to speak English due to the fact that the third grade students had only been learning English for six months, and the first grade Students had at that time no previous experience of English language learning.

Post Service

After each set of Animation Workshop lessons has concluded the Project Leader analyses the results of the student questionnaire and uses that data when planning the next series of Workshops. Notes made during the previous Workshop are also analysed. These could be fairly simple or more elaborate observations. The feedback, observations and insights of the Teachers worked with is as important as those from the Students and is also used in the creation of subsequent Workshop iterations.

4.3 Stakeholders

Introduction

A stakeholder is a single individual, a group of people, or a company, institution or other professional or non-professional body that has some connection to or involvement with (the service). They can influence or be influenced by the actions and aims of the service (businessdictionary.com, 2019).

Stakeholders

The following diagram shows all of the actors involved with *The Service*, their roles and actions at all stages of the service period.

WHO	STAKEHOLDER ROLE(S)	FUNCTION (pre, during and post-service)	Position On Stakeho

Gerome Macken	Co-Commissioner of The Service, Service Provider, Animation Workshop Leader, Service Designer, Native English Speaker	**Pre-service:** ● Co-designs workshop with teachers ● Plans Workshops with teachers ● Makes lesson materials During service: ● Presents / leads the workshop After service: ● Collects, collates and analyses end user survey data ● Assesses and analyses workshop, uses information to influence the design of subsequent workshops	**Level 1**
The 7 Teachers, for whose lessons the workshops were provided: **A** **B** **C** **D** **E** **F** **G**	Co-Commissioners of The Service, Co-Designers of The Service	Pre-service: ● Books the workshop service from service provider ● Discusses and co-designs workshop lessons with the Service Provider ● Makes a lesson plan with the Service Provider ● Tells students about the workshop themes (if themes used; if not, other pertinent information given) During service: ● Carries out regular teacher duties in the workshop lessons ● Provides logistical and organisational support (ipads, help exporting finished movies etc.) Post Service: ● Sends animation media files to service provider if needed ● Provides pay / admin. info. to service provider. ● Processes Relevant paperwork in relation to Kielivirta / City	**Level 1**

		Education Department ● Fills in follow-up teacher questionnaire	
The Students of the classes concerned, from grades 1, 3, 7, 8 & 9	End users of The Service	Pre-Service: ● (If given workshop themes beforehand) think about ideas for their animations During service: ● Participate, enjoy, learn After Service: ● Provide feedback via surveys / questionnaires	**Level 1**
School Organisations In Whose classes The Workshops are held	Stakeholder	● Provides school infrastructure, organises timetable, manages School premises etc. ● Employs teachers in whose lessons The Workshops occur ● Arranges activities that affect The Service (for example, it's half of Finnish / Dutch Exchange program during which workshops have occurred)	**Level 2**
Turun Kielivirta	Stakeholder	● Administers funds to pay the service provider as a freelance professional. Acts as go-between	**Level 2**
Turku City Education Division	Stakeholder	● Interprets NCCBE in its local curriculum ● Provides/ Allocates education Budget for the City of Turku ● Provides / Allocates funding for Kielivirta scheme, among others	**Level 2**
Suppliers of Classroom equipment	Stakeholder	● Supply furniture and audio / visual equipment for use in school classrooms	**Level 3**

Finnish National Board of Education	Stakeholder	- Sets national curriculum - Organises Basic Education at a National level - Provides / allocates budgets for education	**Level 3**

Fig 7. Stakeholder Table

Stakeholder Map

A stakeholder map is a diagram that depicts the different actors and organisations in a particular situation. A stakeholder map can be utilised in order to know who is associated with the situation in question, and how and to what extent these different individuals and organisations are linked with regard to the situation. (Stickdorn et al. 2018, 58.)
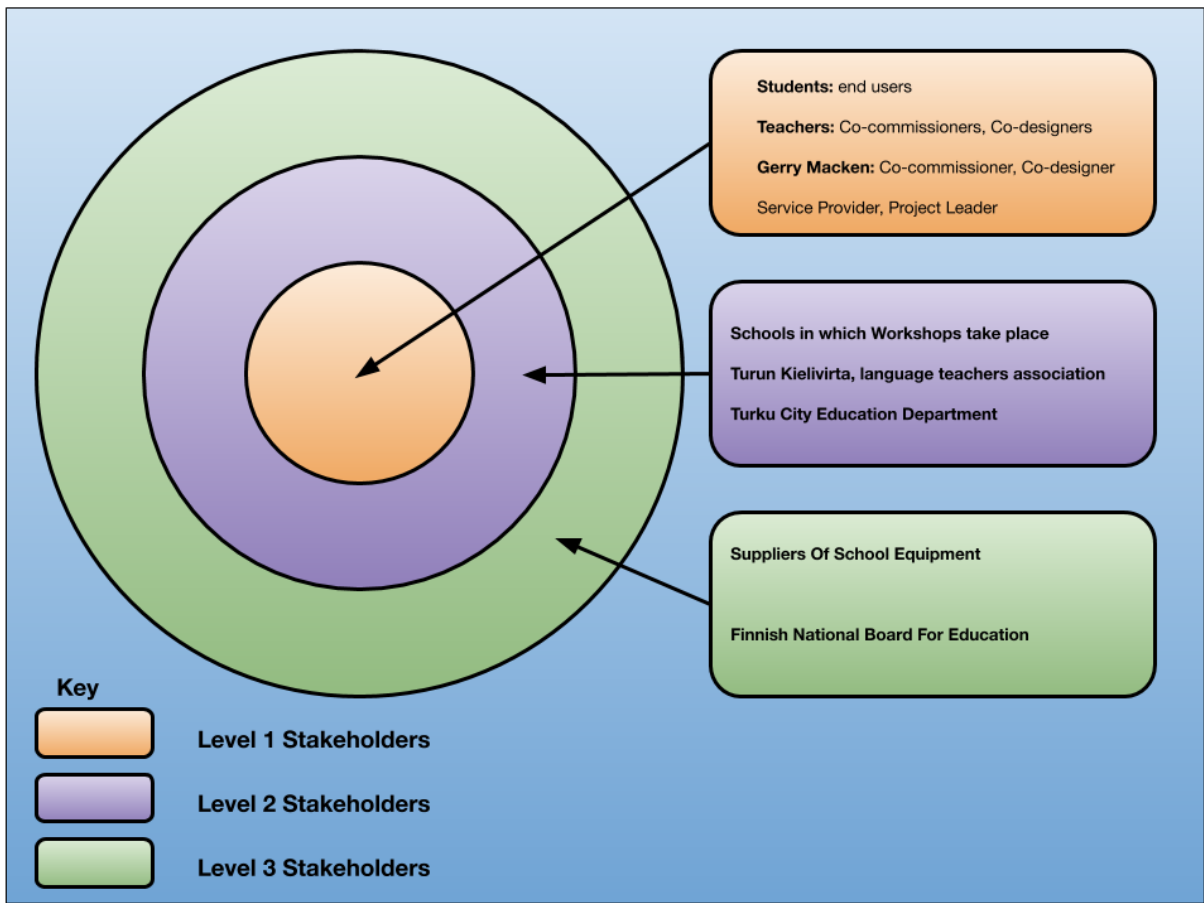

Fig 8. Stakeholder Map

Explanation of Stakeholder Levels

In the stakeholder map, the different stakeholders are divided into three levels, based on the

amount of involvement and direct influence they have on *The Service*.

Level 1 Stakeholders have direct participation in and influence on *The Service*. Level 2 Stakeholders are involved in the service process but not involved in the interaction between the level 1 Stakeholders. That is, between the students, the teachers and the Project Leader / Service Provider. Level 3 Stakeholders have an influence on *The Service* but have no direct interaction with the other stakeholders. For example, if it were not for the Finnish National Board for Education providing some of the funding to municipal education departments such as Turku City's, there would not be the funds available for initiatives such as Turun Kielivirta, who in turn make it possible to hire professionals to give workshops in schools, such as in the case of The Animation Workshop Service.

Another example of a level three stakeholder is those companies who supply classroom equipment to schools. Without their services there would not be for example the audiovisual and computer equipment in classrooms that make it possible for the Service Provider to show presentations about the workshop or for the use of the iPads on which the animation app is loaded and the animations made.

4.3.1 Stakeholder Requirements - Level 1 - Students

In the case of Students who participate in the Animation Workshop lessons, a good starting point when thinking about what this group of stakeholders needs from the service is the list of requirements that *The Service* needs to fulfil, as was described in chapter 4.1. With those requirements in mind, it is a logical step to ideate what the important factors within the service are from the point of view of the end-users; the students.

The Animation Workshop Activity should engage the Students' interest. It should raise their interest and fire their enthusiasm for the subject. The activity should be structured in such a way as to keep them interested in the topic and make it easy for them to concentrate on making animations in a way that does not become boring or repetitive. The actual process of stop-motion animation is a labour-intensive activity with a lot of repetition, and as such requires a lot of concentration. This must be remembered when designing the animation-making tasks, not only to keep it interesting and fresh for the Students, but also bearing in mind the limited time available; both in individual lessons, and in the number of lessons that make up each workshop.

4.3.2 Stakeholder Requirements - Level 1 - Teachers

As well as the requirements as mentioned in chapter 4.1, there are certain things identified by the Teachers involved as being important from their point of view. On 22nd October 2018 a questionnaire was designed and given to six of the seven teachers in whose lessons Animation Workshops were held (6.1.6). When asked what needs a workshop activity should fulfil, the responses covered several key points of interest. Among them were:

The workshops should provide something different to students, that they do not normally experience during standard lessons. At the same time, there should be a reason for doing the

project and substance. The project should not be done just for its own sake. Therefore, having clear and defined objectives is essential. This was clear from the earliest stages of formulating *The Service*, and that is why the goals of making stop-motion animations and using English as much as possible have been so strongly emphasised at all times, both in the process of creating the Workshops and of doing them.

The workshops should fulfil some of the requirements of the national core curriculum - there should be meaning to what is done. Once again, a lot of attention was paid to this point at all stages of the service design process.

The person leading the workshop should have a good ability with the English Language. Students should also be able to produce English as much as possible in as many ways as possible. This is an essential requirement, when one of the main objectives of the workshop is to promote and encourage the use of English in the completion of the project tasks. In addition to having a good way with the technicalities of the language, it was pointed out that the person leading the workshop should know how to speak to the students on their level. Being able to deal with the students and teach them without being patronising is important, for it helps students to feel that they are accomplishing the set tasks and to continue working with the right amount of autonomy.

Some of the Teachers asked also pointed out that in many ways, the teachers' requirements do not differ greatly from those of the Students. For example, one seemingly obvious but nonetheless important requirement is that both teachers and students should feel after the workshops that they have learned something.

4.3.3 Stakeholder Requirements - Level 1 - the Project Leader

The project Leader has other roles in *The Service*, and therefore many requirements that *The Service* should fulfil. These are explained fully earlier in this chapter and in Chapter 1. To summarise, the requirements of The Service Provider are centered on giving the best possible service he can and fulfilling the criteria laid down in the brief.

4.3.4 Stakeholder Requirements - Level 2 - the Schools Involved

As providers of education, a school's priorities lie in providing the best education possible for students and in making sure that educational activities fulfil the criteria of the NCCBE. As explained by Teacher A in the meetings held with the Project Leader, and later corroborated by answers given to the teacher questionnaire, as long as the guidelines of national and local curricula are met, School authorities tend to leave it to teachers to decide how to follow the curriculum. Teachers have a good degree of autonomy in this matter. This is echoed by Teacher A who said "The teacher is very independent and can make his / her own decisions" (personal communication with Teacher A, 25.10.2018, Appendix 8).

4.3.5 Stakeholder Requirements - Level 2 - Turun Kielivirta and Turku City

Education Department, and Level 3 - The Finnish National Agency for Education

The requirements of the FNAE and of Turku City Education are so close as to be virtually the same. Therefore they can be included together here. The reason for this is because the curriculum guidelines are essentially the same; created by the FNAE, and interpreted by local education authorities , in consultation with teachers and students.

"There are several projects and initiatives (usually funded by the state in one way or another) that have their own agendas, but all teaching and syllabi always follow the curriculum.

The core curriculum is the basis for the local curriculum design. Each school then adds their own adaptations to the local, city-wide curriculum – as much as it is allowed in the national or city guidelines.

Some schools such as Puolala, Vähä-Heikkilä and Luostarivuori offer specialized bilingual/CLIL education, but also that is specified in the curricula.

When it comes to educational policy, it is of utmost significance that teachers, principals, students and their stakeholders are consulted. The degree of and method for their involvement varies in accordance with each planned policy measure but everyone is usually involved. E.g. the city curriculum was put together by a group of more than 100 teachers and principals, but each student in the city also gave their input (prior to the actual design work, so their point of view weighed in, in all the parts of the design process)."

> Salla Sissonen, Pedagogical Designer, City of Turku Education Department
> (personal communication, 20.10.2017)

As far as Turun Kielivirta goes, as stated by Teacher C in the questionnaire, "The only requirement of Kielivirta is the fact that the project is beneficial for pupils" (personal communication with Teacher C, 25.10.2018, Appendix 8). This is a little more to this however, for when attending a planning meeting for the Workshop at Vähä-Heikkilä school, The Service Provider met a teacher there who at the time was the representative of Turun Kielivirta with whom one liaised in matters relating to payment and other administration. She mentioned that one of the requirements Keilivirta had as the purchaser of The Animation Workshop Service was that English be used by the Project Leader as much as possible during the Workshop lessons.

As far as any other requirements Kielivirta had from *The Service*, there was not much specified, as Kielivirta trusts that its member teachers will only make use of workshop professionals who fulfil teachers, students and the curricula's needs. The impression received by The Service Provider was that as long as these needs are fulfilled, that is enough.

In answers given to the Teacher questionnaire, Teacher D said that with regard to the OPS 2016 (The New National Curriculum), classroom instruction should help students "to grow as

multiskilled users of language, both in their own language and in guest languages" (personal communication with Teacher D, 25.10.2018, Appendix 8).

Stakeholder level 3 - Suppliers of School Classroom Equipment

Although it is clear that without the furniture, projector, screen, computers and other classroom equipment used, the workshops could not take place - and therefore the companies that supply such things must be counted as a stakeholder in *The Service* - they do not have direct involvement or influence on *The Service*, its goals or other factors.

5 Teaching and Learning

Introduction

This chapter examines some theories, concepts and practices related to education and learning that have helped shape the creation of the Animation Workshop Service.

The amount of research done, both academic and practical, about these theories, concepts and practices is so much, that any one of them could be the subject of a thesis study all by themselves. Therefore what follows is a brief summary; to include salient points from just four main topics in order to acknowledge them as an influence on the creation and execution of *The Service*. However, it should be borne in mind that this information presented represents a small amount of a much larger body of information gathered, and that choosing what to include in this chapter and what to omit has been a challenge.

At the start of this project, very little was known about the educational ideas or processes or techniques that form the ideological basis for The Animation Workshop Service. Therefore, information was gathered about these various theories. The diagram in figure 9 represents an early visualisation of some of the ideas that it was believed could be looked into as a basis to this study.
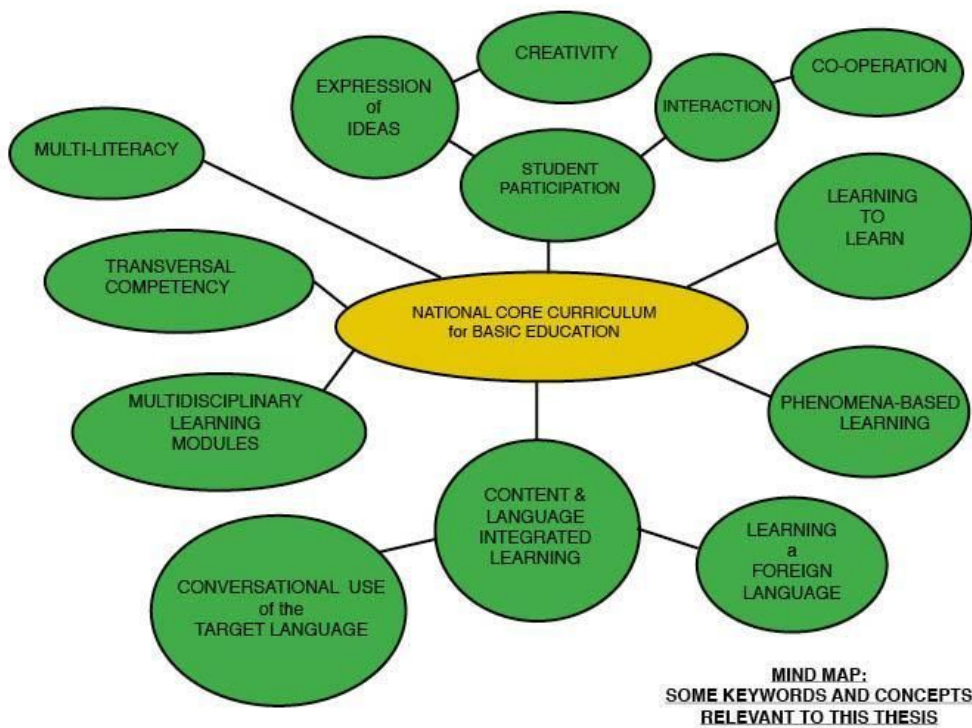
Fig 9. Mind Map of Teaching and Learning Keywords

After that research, and as a result of having gone through the service design process that has given rise to The Animation Workshop Service, those key aspects that are described in chapter 2.2 were arrived at. What follows is a more thorough examination of each of these key theories.

5.1 The Use of Technology as a Learning Tool

The use of computers and other digital technology in the classroom has been the subject of a very large amount of research and study. Therefore, this chapter will aim to summarise just the most relevant pieces of research that have been made into this aspect of *The Service*.

A Brief History of Computers in Finnish Schools

The sight of a computer in any classroom is not unusual anymore. Technology is now ubiquitous in education, but this was not always the case. The history of Computers in Finnish education starts in the 1970's. Former students who had used those computers and later became teachers introduced the idea of using computers in schools, but the idea did not take practical shape as a regular feature of classroom activity. (Koivisto 2014, 239-245.)

In the early 1980's the growing popularity of computer programming as a hobby among some

teachers and some students (predominantly male) lead to some maths teachers incorporating computers into their workflow. Around this time some schools in many parts of the western world started to introduce computer programming as a subject in and of itself. (Koivisto 2014, 239-245.)

Other significant developments which helped put computers in the minds of teachers, students and the general public was the launch of the Commodore 64 in 1982 (which lead to this machine's popularity with a lot of Finnish Teachers of special needs students), the use of Nokia computers in School Computer labs in the 80's, and the emergence of Apple Macintosh Computers. Although these latter machines were expensive and therefore not taken up by many schools, a good number of educators began to see the potential for the use of computers in the classroom beyond programming, due to the Macintosh's superior graphical user interface. (Koivisto 2014, 239-245.)

In the early 1990's the FNAE (still then called the FNBE) collaborated in a research project with some universities to try and discover state-of-the-art ways to bring the use computer technology into the classroom called "Finland towards the Information Society". Since then this Finnish government educational body has been behind many initiatives of this kind. (Koivisto, 2014, 239-245.)

EUROCALL

EUROCALL is the European Association of Computer Assisted Language Learning. It is an organisation made up of professionals from the fields of research, teaching and technological development who are enthusiastic about the use of technological applications for foreign language and cultural education. Their objectives are to publicise and endorse the making and distribution of knowledge in a variety of areas that include "Applied Linguistics, Digital Pedagogy and Computer-Mediated Communication", among others. (eurocall-languages. 2019.)

SAMR

S.A.M.R is a concept invented by Dr. Ruben Puentedura, and is a model of his theory of the integration of technology into the learning process, and the four different levels of impact and change that can be brought about through the use of technological learning tools. In its widest definition, a technological learning tool can be thought of as a way of doing or procedure as well as a physical object or system that fulfils an aim. Examples can include software for handheld, tablet, laptop or desktop devices, and these devices themselves, screens or other interactive interfaces, audio-visual media, such as a video or podcast, a web-based tool of cooperation such as Google docs, and social media applications. (wikiversity 2019.)

The acronym S.A.M.R. stands for Substitution, Augmentation, Modification and Redefinition. The theory can be partly explained with the following diagram:
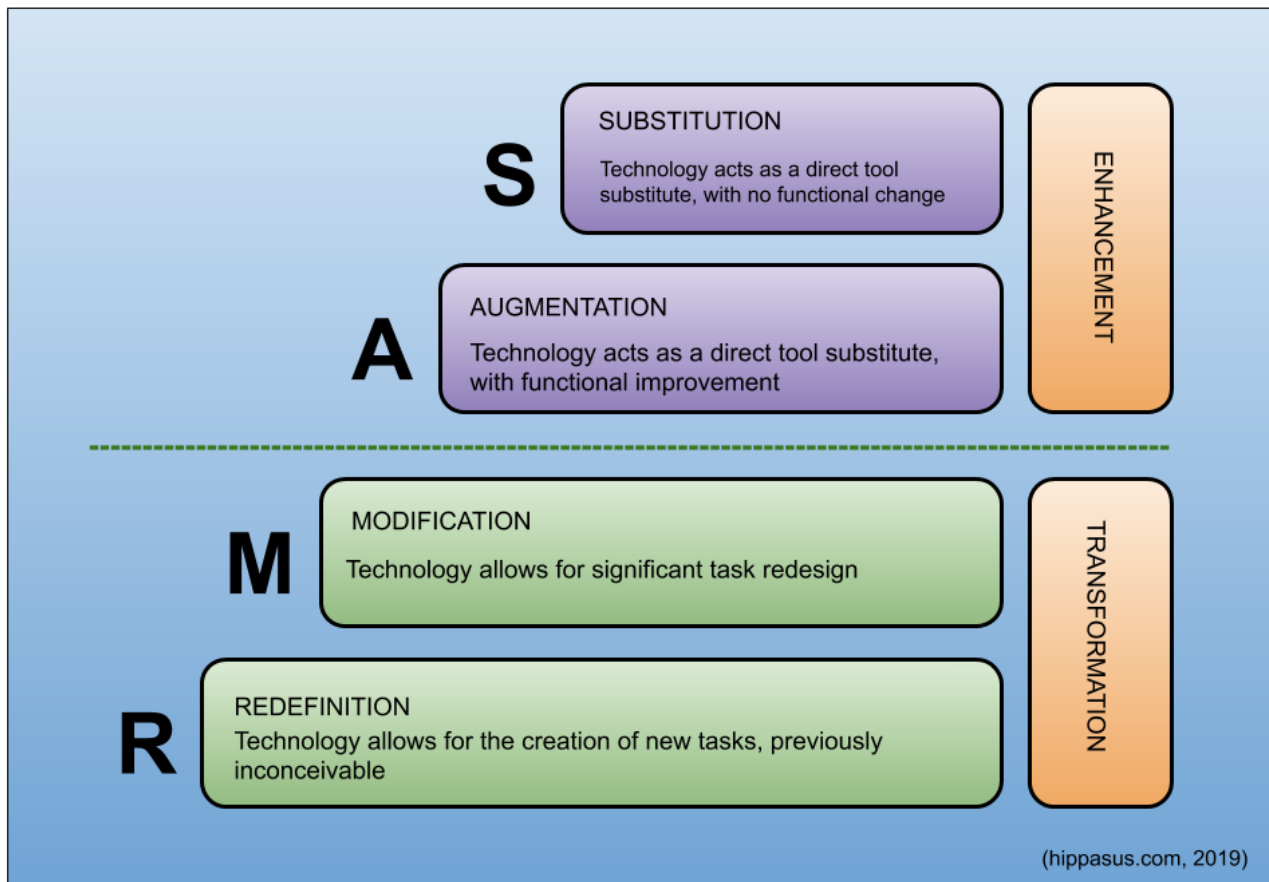
Fig 10. The SAMR Model By Dr. Ruben Puentedura. (Modified from hippasus 2019 and Wikiversity 2018.)

How the SAMR Model Works

The first level is Substitution. It is crucial that an educator does not feel uncomfortable when using new technological tools in an educational setting, to develop their use. It is satisfactory for teachers to start by simply substituting existing learning tools with technological ones. As they become more comfortable with their use, the next level may be proceeded to; Augmentation, where the functionality of the chosen tool or method can be improved somehow. This increases the quality of the tool, and the task. (commonsense.) Puentedura recommends this as a "perfectly valid approach." An example of this could be that if teaching about poetry, a teacher might create some kind of electronic resource that includes examples of poems, some audio examples, and some elements of criticism that would enable learners to experience different interpretations of the poems being studied. Puentedura states that in this approach, it may be enough for a particular practice to encompass only the first two levels. If a teacher so wished, they could think of some other technological method with which to modify and if so wished redefine the teaching of, in this example, poetry.

In the SAMR model, the distinction between Augmentation and the next level up, Modification, is described as the difference between merely performing the same task as before but with the use

of a technological tool, and whether the task is being significantly re-structured, adding some kind of new functionality, but maintaining the original ethos at the basis of the task. (commonsense.)

In the last level, where Augmentation of a task moves into the area of Redefinition of a task, the technological tool in question gives learners the ability to move into fields of practice within the task in question that may not have been gone into before (commonsense). The example given by Puentedura is based on chemistry studies, where technology sheds light onto the thought process of a chemist by being able to visualise molecular structure in greater detail and to be able to analyse it with the technological tools used.

5.2 Project-Based Learning

The idea of instruction that is based on the completion of a task, a project, or the solving of a question or realistic challenge is something that exists under different names, but which can be grouped together as they share common attributes. This chapter looks at some of these methods and describes them, their key aspects, functions and their educational aspirations and outcomes.

Nomenclature

The term used most often in this chapter, and what is most commonly referred to when researching the subject is Project-Based Learning (PBL). Names of similar theories include Phenomenon-Based Learning (PhBL), Problem-Based Learning (PrBL) and Collaborative Project-Based Learning (CPBL). (wikiversity 2009; Bell et al. 2010; pblworks.)

PBL

Project-Based Learning is an inventive way to teach that passes on the knowledge and practice of many different ways of working that are important in order for students to succeed in the modern world. Learners take charge of their own learning process through the questioning, examination and scrutiny of a subject. Using this way of working encourages the student to develop new technological aptitudes, and to be able to communicate well and answer questions by arriving at a satisfactory conclusion. (Bell, 2010, 39-43; tandfonline 2010.)

In Project-Based Learning learners build know-how and practical aptitude by working on the investigation of and response to a realistic question, challenge or problem (pblworks).

Problem-Based Learning

Problem-Based Learning is essentially concerned with the same key objectives as PBL. It places its emphases on real-life situations. It is a method of building and conducting systems of instruction that use challenges as the catalyst and focal point for work by the learners. (Boud and Feletti 1997, 2.)

It can be said that the making of an animation is the "problem" or challenge that has to be

completed. Students have to work together in order to complete the challenge and produce a practical and concrete result; a finished stop-motion animation.

As with Problem-Based Learning, some of the key features of Project-Based Learning are:

- Self-Direction
- Inquiry
- Collaboration
- Learning New Skills By Doing

(Bell 2010, 39-43; tandfonline 2010.)

The task-based nature of PBL is what sets it apart the most from traditional classroom learning. Project Based Learning helps to sharpen the following skills in students:

- Critical thinking
- Creativity
- Communication skills
- Teamwork

(Bell 2010, 39-43; tandfonline 2010.)

5.3 Multi-Disciplinary Learning & Content and Language Integrated Learning - CLIL

Introduction

Multidisciplinary Learning is a form of teaching where the studying of more than one subject is combined. The various ways in which this is done are many, but often they share a project-based characteristic. Presented here is information about the Multidisciplinary approach to teaching, and it's counterpart, Content and Language Integrated Learning (CLIL), which is a form of Multidisciplinary Learning related specifically to the teaching of languages.

The example shown in chapter 2.2 where participants at Kielikoulu Elf studied winter animals through arts and crafts in order to learn the English vocabulary is one such real-life situation where these theories have been put into use in an educational project in Turku.

Multidisciplinary Learning in the NCCBE

Every school must have at least one clearly-defined theme, project or course per school year, that combines the content of different subjects and deals with the selected theme from the perspective of several subjects. These are called multidisciplinary learning modules. When municipal curricula are drawn up, the details, aims, and ways of introducing the modules is determined, and specified in the yearly programme of the educational institution concerned.

Other details such as topics and project duration may vary based on local needs and interests. (Finnish national board of education 2016, 33.)

The teaching of the English language can be combined with various differing topics and modules of learning in a multidisciplinary way, and this can also work the other way around. Students are emboldened to seek out facts and knowledge on various topics in English. (Finnish National Board of Education 2016, 375.)

CLIL

Content and Language Integrated Learning is a method of foreign language learning where instruction is given in some other topic, but using the intended language being learned. Activities are constructed as to facilitate the learners to make the target language their focus as they utilise it to learn the other topic being taught. Support material used often emphasises a visual element, in order to convey meaning. (teachingenglish 2019.)

Background of CLIL

The idea behind CLIL is old; practices of the kind described can be traced back to ancient times. However the name "CLIL" was originated in 1994 by David Marsh from the University of Jyväskylä, who has said of it "CLIL refers to situations where subjects, or parts of subjects, are taught through a foreign language with dual-focused aims, namely the learning of content and the simultaneous learning of a foreign language." (onestopenglish 2019.)

There are currently a number of different terms for a variety of teaching methods that share some of the attributes of CLIL. Examples include Bilingual Integration of Languages and Disciplines (BILD), Content and Language Integration in Primary (CLIP), Content-Based Language Instruction (CBLI) and Foreign Languages as a Medium of Education (FLAME). (onestopenglish 2019.)

CLIL in Action in Turku - Kieliluokat

Kieliluokat ("Language classes" in Finnish") is a CLIL scheme run by schools in the cities of Turku, Naantali and Raisio. Five schools in the city of Turku operate CLIL classes (blog.edu.turku. 2019). Among them is Puolala School, which is one of the schools that hosted The Animation Workshop Service (Chapter 6.2).

In the Kieliluokat scheme, both Finnish and the target language in question is the language of instruction. The foreign languages featured in the scheme are English, French, Russian German and Swedish, which is the second official language of Finland. From classes of grade one to nine, students receive instruction in a variety of different subjects, using a foreign language and Finnish as a unified single purpose. The language used at any given time by staff is the one that matches the particular situation and aim. The acquisition of language is not the primary goal in the scheme, but languages are used as the means by which the other subjects are taught. Traditional language instruction is also given in schools participating in Kieliluokat, so that a formalistic

language learning methodology is not neglected. (blog.edu.turku. 2019.)

5.4 Learning By Doing

"A basic education curriculum may contain vocational studies."
- Finnish Basic Education Act 628/1998

Introduction

As this Thesis project has developed, it has become clear that the concept of Learning By Doing underlies the central ethos of *The Service*. The idea that one does not need prior or complete knowledge of a subject, task or process before undertaking it; that the act of doing itself embodies a valuable learning process. Other terms by which Learning By Doing is known include Action Learning and Experiential learning.

John Dewey

One of the key figures In the Development Of Learning By Doing was the American philosopher John Dewey, who wrote much about the use of practical situations to teach a subject. In the article "My Pedagogic Creed" from 1897, Dewey says, "I believe that the school must represent present life – life as real and vital to the child as that which he carries on in the home, in the neighborhood, or on the playground" (Dewey 1897, 77-80). Although Dewey worked a very long time ago, his ideas still have relevance to the Author, as an influence on *The Service*.

Closely related to the idea of Learning By Doing is Action Research and Prototyping, (6.1), which shares with Learning by Doing the key aspect that participation by the individual student, getting involved, trying, and all the while learning is the central point.

Elements of learning by doing are also similar to Participatory Action Learning and Action Research (PALAR). The system of PALAR is a starting point for a general way of designing, building and substance, and as a way to instruct, learn, evaluate and develop. (Zuber-Skerritt 2018, 513-532.)

Key Constituents, Outcomes and Benefits for Learners and Teachers

Although much of the research done in this field was done in relation to adult education, the author believes that within the framework of basic education, these ideas and practices can also be effective for younger learners. Learning by Doing is made up of three definitive stages; the preparation of an activity, the doing of the activity, reflecting upon and thinking about the experience of doing the activity (Boud et al, 2013, 9).

Different ways of studying not only gives students a sense of the wonder of learning something and an understanding of achievement, but also reinforces activities of a creative nature relevant to the variety of ages of students involved. Ways of doing tasks that centre on experiences and the performing of functions that involve a variety of learners' faculties boosts the

experienced-based nature of the learning situation and increases the desire to continue to learn. (Finnish National Board of Education 2016, 31.)

5.5 Foreign Language Learning / English Language Learning

Introduction

Language is vital to learning. It is indispensable for the acquiring of knowledge and experience and for cognitive activity. Language is a fundamental constituent of all activity within a school environment. The development of all manner of cognitive skills is helped by the acquisition of linguistic ability and experience. Language learning gives a basis upon which a recognition and development of a multi-language and many-cultured identity can develop. As a student grows his or her personal lexicon and learns new ways to construct the foreign language being learned, they evolve their interactive and information gathering skills. Within the learning of a new language are the opportunities for happiness, fun and ability to be creative. (Finnish National Board Of Education, 2016, 374.)

English Language in the NCCBE Syllabus

English language instruction in the national core curriculum for basic education covers a large amount of information; guidelines and recommendations, target goals and objectives. The guidelines for foreign languages are the same as those for the second national language. The most fundamental precept of linguistic teaching is that students should use the target language in a variety of differing contexts and environments. This helps students to be more aware of language and to be more knowledgeable across different disciplines. The use of critical thinking and examination of literary material, the use of a their full sets of linguistic capabilities as a way to help their progress in other subjects, and the encouragement to develop their awareness of the many-faceted nature of the language-based and cultural personas of themselves and others. Students learn to have faith in their own language abilities; to use those abilities with confidence, no matter their level of proficiency at any given time. (Finnish National Board Of Education, 2016, 348-349.)

English Within the Youth Culture of Finland

There has, since the early 2000's been research that shows a certain amount of proliferation in the status of English as a means of communication within the demographic of young people in Finland. Interest has been shown in the use of English in the realms of music, computer gaming, and in the writing of web logs and other works by enthusiasts of popular culture. (Leppänen 2007, 149, 169.) It is also the authors experience that sometimes young people use english phrases to punctuate conversations in Finnish, as it seems fashionable to do so. The hope is that all learners of English use it extensively in whatever sphere of life it may be needed, but the fact that many young people use English in this informal way amongst their friends is a sign that they are comfortable with the language.

6. Service Design Methods And Tools

Introduction

Between January 2017 and April 2018 The Service Provider (the author) carried out a series of Animation Workshops at three schools in Turku as part of the case study for this thesis. At all stages of the research, preparation, design, testing, re-testing and implementation service design methodology was used. All events, including the workshop sessions themselves and the insights gained along the way are summarised to explain what was done and when, the demographics of the Student participants and a telling of how these workshops went (6.2).

Firstly, the service design methods used will be described and discussed. At all stages of the process there were questions to be asked, information to find out, needs to be addressed and challenges to be met, all contributing to the design and execution of *The Service.*

This chapter describes, analyses and discusses what the methods and tools used were, why they were used, what the desired outcome was, how they were used, and what the results were.

Six methods were used. They are:
- Benchmarking
- Co-Design Workshops
- End-User and Stakeholder Journey Maps
- Service Blueprint
- Student Questionnaires
- A Teacher Questionnaire

6.1 Action Research and Prototyping

Research by Doing as an "Umbrella Method" for the Whole Case Study

The reason why Researching By Doing is the first Service Design method to be explained in this chapter is because it can be thought of as a theme that underpins the use of the other methods employed, and as a wider theme for the whole project itself.

Method

Action Research and Action Prototyping describes the concepts of undertaking a project, which is researched and prototyped as the project goes along, rather than having a formal research phase before any practical work is done. It is a way of researching and prototyping *The Service* by the doing of the project itself. The act of doing the project and attempting to fulfil its objectives

serves in part as the research phase and is a way to construct a working prototype of *The Service* as the project goes along. This is a form of Participatory Action Research. Participatory Action Research, or PAR, is a way of researching that is used by groups of people that puts emphasis on doing something, on participating in an activity (Reason and Bradbury, 2008, 1). It is also known as simply Action Research.

While the method is said to be of particular use to those engaged in higher education research programs such as Masters or PhD studies (Zuber-Skerritt, 2018, 513-532), it is the author's opinion that there is value in these ideas that can also be used in designing a service for basic education. For, as has been shown (Chapter 5.4) there is enough correlation between the arenas of adult learning and that of younger students, that the key concepts of PALAR mentioned above are adaptable to the world of basic education; participation, action, trying, doing.

Another methodology that is similar to PAR and PALAR that is influential to the way in which The Service has been developed is the idea of learning by experience and reflecting on that experience. This phenomenon is often referred to as Reflection in Learning and is described as a procedure of actively making discoveries and of exploring, which in many cases leads to results that are not expected. (Boud et al. 1985, 7.)

Why the Method was Chosen

Researching By Doing is a way to conduct continuous research, through the act of doing the Workshops. The method was used starting from the earliest research and the doing of the first workshop lessons in January 2017. Then, through the iterative collecting of information and building of ideas that led to the workshops being conducted in different ways for different user segments' needs. The subsequent learning from challenges, gaining insights and adjusting subsequent ways of doing accordingly for each new set of workshops can be thought of as researching by doing.

It is suggested that there is not just one specific task that constitutes "research", but that all work that contributed to the workshops and the way that they were developed iteratively can be seen as research. Even though it is possible to differentiate between acting and researching under analysis, there is the hypothesis that, at the start of the process of asking questions, acting and researching are inseparably interconnected in a real-world situation. (MacMurray, 1957; Polanyi, 1958.) Although MacMurray's and Polyani's opinions are old, it is the author's belief that is still holds relevance to this thesis, for it describes the ethos of actions being considered a valid part of the research process; as much as other forms of research such as reading for example.

The main reason for using the method in this way was due to the way in which events came about. Real-life events and circumstances dictated a more organic approach to the way that the service was first conceived and subsequently grew. For example, certain lessons within the first two sets of Workshops conducted crossed over with each other. On 26.01.2017 the Service Provider held lesson 1 of 4 of the 7th grade Workshop, and lesson 3 of 5 of the 9th grade

Animation Workshop. This kind of schedule was dictated by the school timetable, and therefore required the flexible approach described.

Another reason that this method was chosen is that the idea of creating The Animation Workshops grew organically and qualitatively. One idea naturally led to another, and through thinking about, reading about and discussing the subjects of education, English teaching, and animation, the concept grew. The author believes that parallels can be drawn between this idea of organic natural analysis of a situation and the subsequent answering of the need through the idea of *The Service*, and the idea of researching a project as it develops, and this research in turn influencing the project itself, cyclically and iteratively. In the same way in which Learning by Doing or Experiential Learning is composed of the three main phases of preparation, doing and reflecting (chapter 5.4), the process of researching *The Service* by doing can be seen as an adaptation of this approach.

The Desired Outcome of Using the Method

A) To have conducted the workshops to the satisfaction of all stakeholders (all participants, students, teachers, service provider and other stakeholders) and to the fulfilment of their objectives.

B) To be satisfied that during the whole process, qualitative and quantitative research was carried out, and that what was learned, not just by that research, but by the process of doing the workshops themselves, contributed to the overall positive outcomes and concrete results achieved.

Use of the Method

The method was used by constantly looking at how individual workshop lessons and whole sets of lessons went, evaluating and assessing whether they were successful, reviewing challenges encountered and strategising around them and using the insights gained when ideating and creating the next part of the process.

As the project has developed and events have occurred in the way that they have, it has become increasingly clear that this has become a central theme of the project, and the other Service Design methods used have been done embracing the principles of Researching By Doing; preparing, doing and reflecting upon.

Using the Method From the Start of the Project

The initial idea of what was required of the first Animation Workshop came from the early discussions in January 2017 with Teacher A, in whose English class the workshop occurred. That first workshop occurred during six separate English lessons, between 20.01.217 and 31.01.2017. During this workshop, and over the course of subsequent workshops, the identity and substance of the Service grew and evolved naturally from the initial fact of doing the workshops in order to

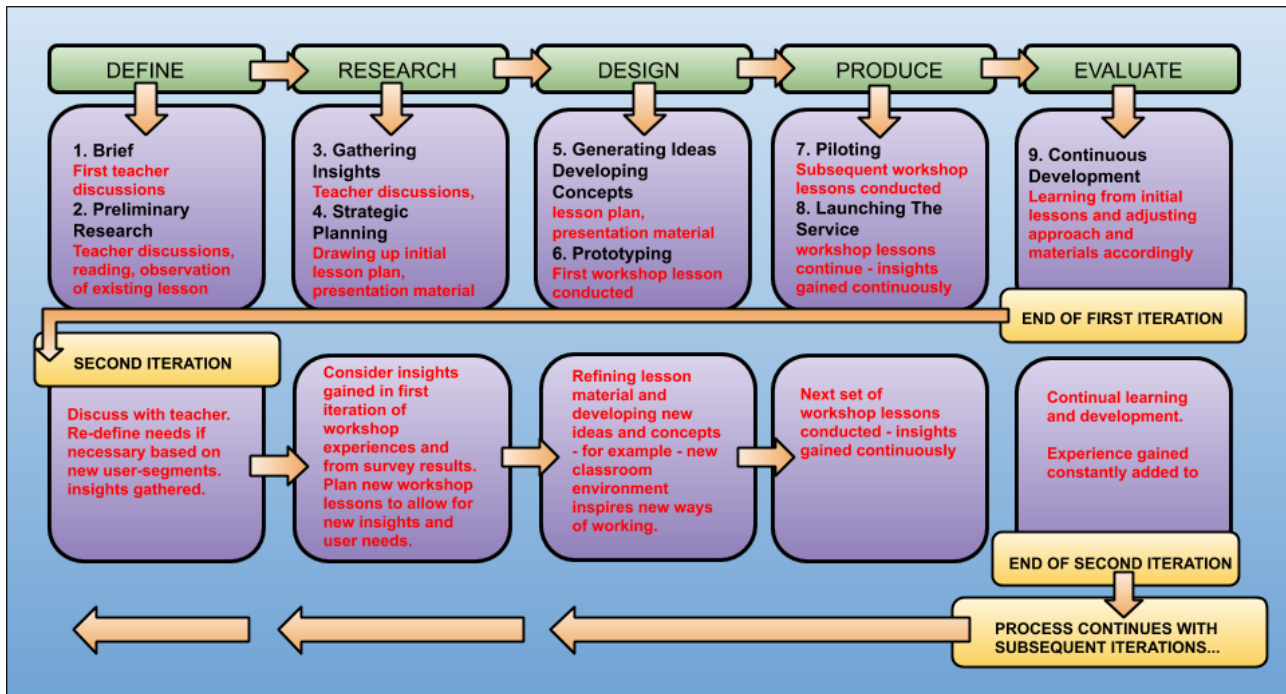fulfill the basic early requirements.

Fig 11. Action Research and Prototyping as an Approach

Figure 11 shows how *The Service* was continually learned about and improved. It is intentional that this figure bears some resemblance to figure 3, the Process chart shown in chapter 2.3. While the process chart shows how the use of the chosen Service Design methods fitted into the process, this diagram shows how, in tandem with that methodology, *The Service* was continuously refined and developed by the use of Action Research and Prototyping as an overall approach to the project.

The Results of Researching by Doing

Because researching by doing is an approach to the all the other work done in this project, the results and evidence of effectiveness of this method are shown by the results of the other methods used, and the overall results and outcomes of the project.

6.1.1 Benchmarking

Method

Benchmarking is a technique used in the Service Design process by which the product or service being developed is compared to similar existing products or services. They can be similar in the objective or function they perform or operate. Organisations use benchmarking to measure their products (whether they are based on the experience of the customer, the provision of a service or of manufactured articles) against those of other organisations, so that the best ways of doing things can be determined. (Curedale, 2013, 116.) Benchmarking can be used not only with

organisations within the same field as that in which one is engaged, but also with those that are in a completely different field of activity (upyourservice).

Benchmarking Used in Service Design

Benchmarking is used to detect standards of good practice and to create those in one's own endeavours. It involves a way of seeking the best ways of doing in an ongoing way that has a definite structure, and taking on those ways oneself. It is also a way of gauging how well one's ways of doing are compared to the ways of high quality organisations in the same field. (Curedale 2013, 116.)

Why the Method was Chosen

The Animation Workshop Service is quite an unusual combination of elements. The use of the English language exclusively. A project-based learning approach. Traditional, hands-on stop-motion animation techniques. Capturing the images that make up the animation with an iPad (or other tablet computer) demonstrates the use of technology as a classroom learning tool. Therefore, it is sensible when researching, building and testing such a service to see if there is anything else out there like it. Comparing it to similar initiatives and examining their teaching methods, the challenges they face and how they meet them helps the service designer to know how best to address similar needs, meet similar challenges and deliver similar results.

A typical benchmarking process can work like this:

- The product, service or process to be benchmarked is selected
- The most important factors to be judged are identified
- Information about those factors is collected
- The data is assessed and possibilities for improvement of one's own service or product can be identified
- Those ways of doing that have been identified as being the best can then be adopted by a service, with appropriate adaptations made where necessary
  (Rigby 2017, 18.)

Benchmarking is often used to ascertain what the intentions of the service being created are, to gain knowledge of the overall context in which the service will sit, to gain knowledge of the user of the service or product in question, and to frame insights that have been gained (Curedale, 2013, 116).

The Desired Outcomes of Using the Method

One of the desired outcomes was to have a better understanding of the whole area in which *The Service* operates, to know the contextual landscape. Another desired outcome was to try to learn from other organisations as much as possible about their objectives, activities and methods, the challenges they face and how they overcome them. To get to know some other initiatives and

service ideas that have similar traits. By doing this, insights and inspiration could be gained that could help at all stages of the Service Design process that gave rise to *The Service*.

Use of the Method

The Animation Workshop Service was broken down into its four main aspects, which embody the objectives and focus of *The Service*, and the framework of this thesis. Each of the three organisations that were benchmarked have been researched based on how they address the four main aspects of *The Service*, as shown below:
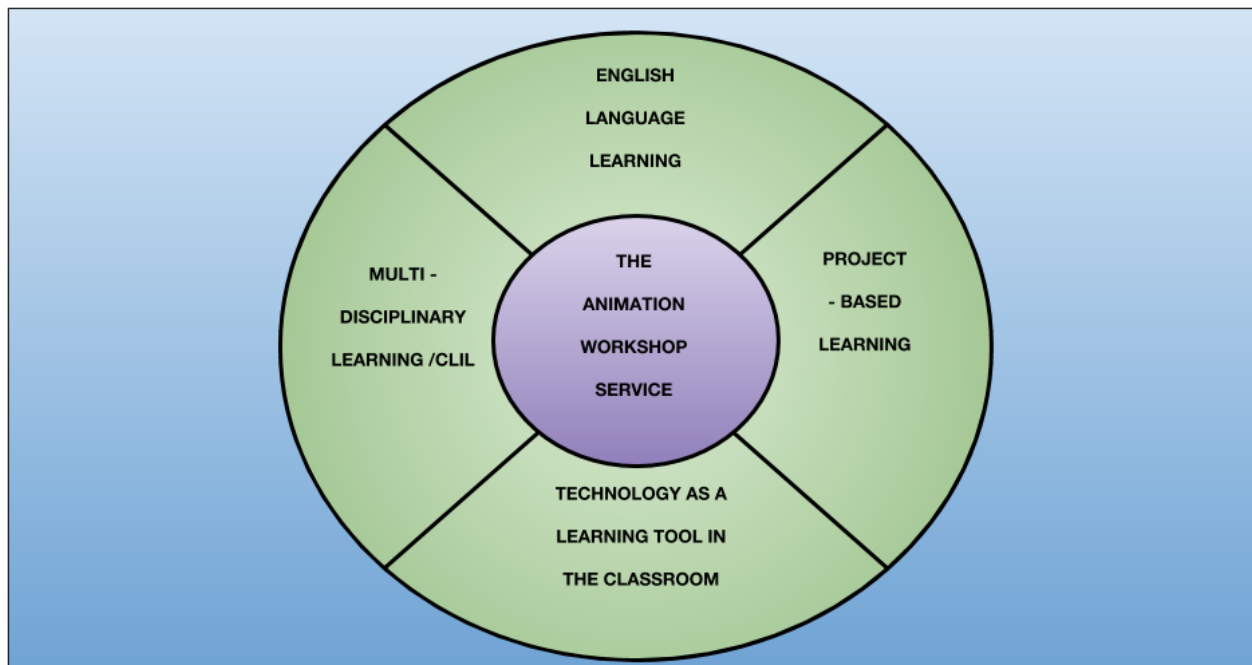
Fig 12. The Four Main Service Aspects to be Benchmarked

The four main aspects of *The Service* that are going to be judged by Benchmarking are:

- Technology As A Learning Tool In The Classroom
- Multi-disciplinary Learning (also known as Content and Language-Integrated Learning, or CLIL)
- English Language Learning
- Project-Based Learning

The three organisations that were benchmarked each have their own strengths that can be learned from. The following table shows who the benchmarked organisations are, what they do, and some other key information.

Organisation & Other info	Objectives / Philosophies	Methods / Activities
TOP-keskus ● Provides training for teachers in ICT ● Founded in 1986 ● Funding comes from Turku City and The Finnish National Agency for Education ● Between 1700 and 1800 teachers trained annually ● Teachers dealt with come from kindergarten, secondary, upper secondary and vocational institutes ● Responsible for common systems used in schools ie. Microsoft Office 365, OneDrive, Moodle, Wordpress	● Training teachers in Turku area in ICT applications and use in the classroom ● Encouraging and assisting teachers in implementing ICT in the classroom ● Flexible approach to ICT services - teachers decide which ICT tools they want to use and how they want to use them. ● To de-mystify ICT for teachers and help it become an everyday part of classroom life ● To encourage teachers to ICT as a tool to accomplish their teaching aims - not to use ICT for its own sake	● In every school in TOP-keskus' sphere of influence is at least one teacher who is trained by TOP-keskus in ICT use. Fellow teachers can get help from this "ICT Expert Teacher." ● Training sessions and classes for Teachers held at TOP-keskus office in Tukru ● Training for teachers also held in the school in question ● Every student in a Turku school to be equipped with their own iPad or laptop computer. By autumn 2019, all students from grades four to nine with have their own device.
Åbo Svenska Arbetarinstitut (Arbis) ● Swedish Adult Education Centre ● Founded in Turku in 1908 ● 2.5 full-time staff positions ● 120 part-time teaching staff ● About 3,000 course participants annually ● A wide range of ages are catered for - learners from ages of seven weeks to 101	● To provide a wide range of courses ● To be open to anyone, regardless of educational background - from Phd Students to the illiterate ● To be open to all nationalities - students with 38 different mother tongues taught in 2018 ● Open approach to learning - students decide for	● Course offered in a variety of subjects. For example, cooking, arts, languages, handicrafts, yoga, gymnastics. ● Language courses held for all levels, from basic to native speaker level. ● Most courses taught

years have participated in courses ● Costs of courses are kept low thanks to partial funding by the state and the City of Turku.	themselves if a course is right for them - college administrators available to give advice ● Language teaching concentrates on common real-life situations - practicality is important ● There are no language exams, but the common European system is used: A1, B1, etc. ● Some courses are project -based	in Swedish ● High level English is taught in English but gradually more and more English levels also offer tuition in English ● Teaching methods depend on teacher and kind of group
Kielikoulu ELF ● Kielikoulu ELF is a language school for children and young people in Turku ● "Kielikoulu" means "language school" in Finnish and the "ELF" comes from "English Language Fun" ● They run clubs, camps, private tuition and gym clubs in English outside of school hours ● Some work is also done in schools with children of grades 1 and 2 ● Activities also take place in some Kindergartens ● Adventure holidays to England for children and young people also arranged and undertaken every summer	● Fun, game-playing and incidental learning are key aspects of Kielikoulu's approach ● The project being done and participation are the most important aspects for Kielikoulu ELF. ● Multidisciplinary learning is also very important. For example, in a winter-themed project about animal footprints in the snow, children learn about vocabulary, natural history, biology, nature, weather, arts and crafts, and they do it in English. ● Children are not forced to only speak English, but are encouraged and guided to explore language, incidentally, through the games and activities undertaken.	● Fun, game-playing and incidental learning are key aspects of Kielikoulu's approach ● Examples of activities include board games, puzzles, word games, craft activities, movement-based activities and "sporty" games ● Doing activities in English gives the children a real sense of accomplishment when they understand enough to do the activity / task at hand. ● Children with mixed abilities learn with each other in a spirit of cooperation and inclusiveness.

		● Music and singing are used and seen as good ways to use the English Language.

Fig 13. Table of Benchmarked Organisations

This information is taken from interviews conducted with the following heads of these three organisations: Jouni Paakkinen, Executive Director of TOP-Keskus, Elina Hällström, Director of Kielikoulu ELF, and Sixten Westerby, Principal of Arbis. The interviews were conducted in the autumn of 2018 and spring of 2019. The full interview transcripts are featured as Appendix 1.

Benchmarking Diagram

The following diagram shows how the three organisations chosen for benchmarking relate to the four main aspects of *The Service*.
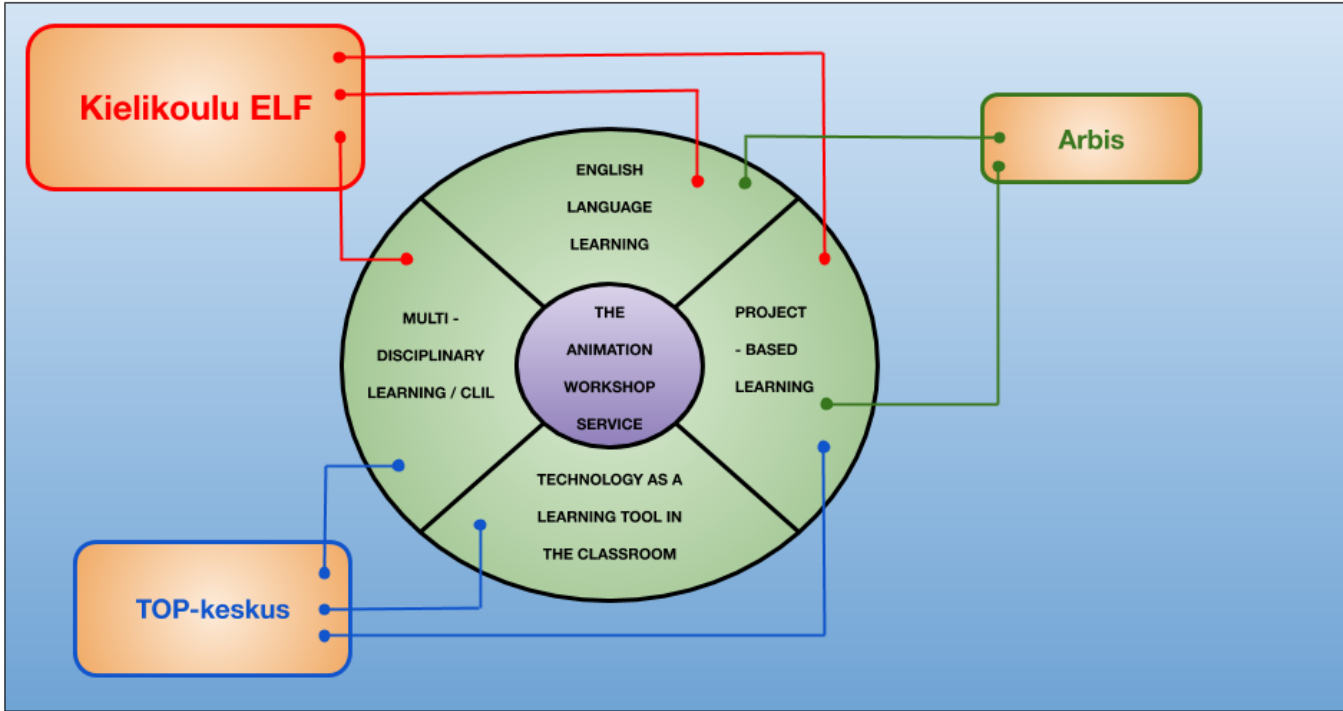

Fig 14. How the Benchmarked Organisations Relate to the Four Main Service Aspects to be Benchmarked

Technology as a Learning Tool in the Classroom

Of the three organisations Benchmarked, TOP-keskus has the most dealings with ICT (Information and Communications Technology) and its use as a learning tool. This is because their remit is exclusively ICT, its development and implementation in Turku schools, and the guidance, training and support they provide for teachers using it.

A summary of the key philosophies of TOP-keskus is as follows:

All people are different. And all Teachers are different. So training and knowledge is offered on may different levels depending on what teachers want to do with ICT tools and methods. Keeping up to date and looking to expand their knowledge about what teachers and students want is important to TOP-keskus. Not only applications and that can enhance the classroom experience, but for new kinds of teacher training opportunities. (personal communication with Jouni Paakinen, 20.12.2018, Appendix 1.)

Sharing of knowledge with other organisations in a spirit of collaboration and openness is important. They take part in various seminars and events, and communicate with other organisers of such schemes and training. Social media is important for this reason. Teachers who are not so experienced or aware of what is available in ICT for the classroom are not be put off or discouraged, but should "dip their toes" into the possibilities of ICT gently. (personal communication with Jouni Paakinen, 20.12.2018, Appendix 1.)

"And that's in one of our main messages now when we are implementing these ipads and laptops, that you don't have to be an expert instantly and you don't have to do all the things that are available, but start with something and build from there, and that's much more useful to do something properly than try to do many things and not go very far in any of them." (personal communication with Jouni Paakinen, 20.12.2018, Appendix 1.)

This is a message of importance not just to teachers or students, but anyone, from any background and involved in any activity. Mr. Paakkinen illustrates this idea by describing the S.A.M.R. model of ICT use in learning, as developed by Dr. Ruben Puentedura (hippasus, 2019.) (5.1).

Åbo Svenska Arbetarinstitut and Technology as a Learning Tool

The attitude that Arbis takes towards the use of technology as a learning tool is summed up as follows: Arbis do not have many courses that relate directly to the use of technology (personal communication with Sixten Westerby,12.02.2019). A few courses might use technological tools incidentally, for example, the photography course may use image editing tools like photoshop for example, and the data and finance probably uses some spreadsheet software, but beyond that not much can be ascertained. It seems that there is not at the moment much of a technological interface with technology as a learning tool at Arbis. It would seem however, in the author's opinion, that what is there is used in the manner as described by TOP-keskus. That is to say, that technology is not used for its own sake, but in order to accomplish some other task.

Kielikoulu ELF and Technology as a Learning Tool

Interestingly, Kielikoulu ELF has a different approach to this subject, as is shown by Elina Hällström's comments:

"It has a place, I think it can be very valuable. I don't embrace it, I don't really use it[…]we don't use technology basically at all in our clubs; we play board games, and that's special to (the children), because they don't do that anywhere else. We don't have any interactive games on iPads or anything, we're very traditional[...]we have flashcards, we play memory games[…]so I think it (ICT) has a place and it has value, but it's used a lot already, especially in schools, so I think for us as an extracurricular thing, we don't need to do that because they're doing that everywhere else". (personal communication with Elina Hällsrtöm, 18.02.2019.)

At first, this viewpoint came as a surprise to the author. But having interviewed Mrs. Hällström and observed first hand a language club in action, this viewpoint is understood. Kielikoulu ELF does see the value in technology as a tool for learning, but simply chooses to take a more traditional approach to game-playing, projects and activities that support English learning. Kielikoulu ELF believe that this approach to technological tools is one of the things that sets them apart from other organisations with similar goals. This can be seen not as an omission of a technique, but as a way to strengthen project-based, multidisciplinary English learning by using more focus on traditional game play and communication. The lack of learning technology here can be seen as a good reminder to focus on the key objectives for which technology tools are used, for example, in The Animation Workshop Service; as tools that help achieve storytelling, English communication through practical stop-motion animation projects.

6.1.2 Co-Design Workshops

Method

The term Co-Design can refer to either a particular event of co-creation, which is any creative endeavour undertaken by two or more individuals, or it can mean the combined creativity of those from a design or creative background working together with those from other fields (Sanders and Stappers, 2008, 5-18). The Co-Design Workshop is a specific technique wherein The Service Provider / Project Facilitator (the author) held a Co-Design workshop during the course of the project's development.

Why the Method was Chosen

It was decided to hold a formal co-design workshop, in order to work in tandem with and complement the other forms of stakeholder consultation that were employed in this Case Study, so that the needs of the teachers involved; those parties' wishes, feelings, hopes, objectives and intentions could be explored and used as the basis of the research done. The Students are not

forgotten in this. They are the end-users of *The Service*. When participating in co-design activities like this, teachers have the students' interests very much in mind. Co-creation is a vital part of the service design ethos. Therefore it was appropriate to hold a workshop that closely involved teachers. In *The Service*, teachers are not only the co-commissioners (with the Service Provider); they are present in the workshop lessons. Therefore they are active participants and level 1 stakeholders.

The Desired Outcome Of Using The Method

The desired outcome of using the co-design workshop method was for the Service Provider/Project Facilitator and the co-commissioners/teachers to have the clearest idea possible as to what was required from the service in order to make that latest Animation Workshop as successful as possible. A Co-Design Workshop is a way of finding out how the Animation Workshop Lessons should function in order to achieve those goals and successes. Another desired outcome was to improve upon the animation workshops that had already occurred; to make the last set of Animation Workshop Lessons in this case study the best and most well-conducted so far. Foremost among the ideas and insights that it was hoped would be discovered during the co-design workshop were answers to the following overall questions:

1. From the teachers' point of view, what does the Animation Workshop need to achieve?

2. How can the Animation Workshop lessons be made more engaging for students?

Use of the Method

A co-design workshop was held by the Service Provider / Project Facilitator at Puolalan Koulu, the purpose of which was to specifically prepare for the upcoming Animation Workshop that was held there on 17th, 18th and 19th April, 2018, for the combined 8th Grade classes from Puolalan Koulu and Het Pontes Lyceum in Goes, the Netherlands. Participating in the Co-Design Workshop were the two Teachers who would be in attendance in the Animation Workshop lessons. They are identified in this case study as Teacher F and Teacher G.

Co-Design Workshop Journey Maps

The type of co-design workshops method chosen used was based on an exercise called "How Might We." which was invented by the Procter And Gamble company. The method involves the participants making notes in the form of questions starting "How might we…?" (Knapp et al. 2016, 73). In this Co-Design Workshop however, that part of the method was just a starting point. It was decided to take that theme and use it in conjunction with a diagram somewhat similar to a Service Journey Map, which concentrates only on the activities carried out in the classroom, not any pre-service or post service actives.

Three different Journey Maps were made, each listing the different stages of the Animation

Workshops Lessons horizontally. Vertically the maps show the three sets of stakeholders concerned: the students / end-users, the teachers / co-commissioners and the project facilitator / service provider. The Co-Design task was to undertake a series of brainstorming exercises that would fill in the three Journey Maps and therefore provide the kinds of insights, answers and suggestions sought.

Co-Design Workshop Procedure

Firstly, the participants discuss and establish what the desired outcomes are for each stakeholder segment in the AWLs. These aims are then written into each of the three Journey Maps. The participants then fill in the central portions of the first of the three journey maps. The first journey map establishes what each or the three stakeholders do, and what events take place at key touchpoints in the Animation Workshops Lessons. The Teachers are given ten minutes to think about this, and write their ideas down on sticky notes. They do not confer. Then, their answers are discussed among the group, all the participants (including the Service Provider) choose the most suitable suggestion for each stage and each stakeholder segment, and the chosen result is written in to the appropriate box on the table.

After the first Co-Design Workshop Journey Map was completed, it looked like this:

Fig 15. Co-Design Workshop Journey Map Part 1.

The second stage of the Co-Design Workshop is to establish what are the main challenges or

areas that need improvement, for the three stakeholder segments, at each of the key touchpoints of the Animation Workshop lessons. Teachers F and G were given 15 minutes to think about this and write down their ideas on post-it notes. As before, at the end of the 15 minutes their ideas are discussed with the project facilitator, and all three participants chose the most suitable answers ideated and the second Journey Map was completed.

What Are The Challenges Faced By Each Of The Three Stakeholder Groups At Each Stage Of The Animation Workshop?							
	TEACHER'S INTRODUCTION TO LESSON	BRIEFING / PRESENTATION	PLANNING, SCRIPT & STORYBOARD	iPAD BRIEFING / HOW TO	ANIMATING, VOICE - OVERS & EXPORTING	GROUP REVIEW & EVALUATION	DESIRED OUTCOME
STUDENTS	Settling down Understanding what is asked of them Forming pairs/ groups well Paying attention	Accepting who they will be working with. Paying attention and getting on task Asking questions in front of the whole class	Understanding what is asked of them - the tasks they are supposed to do Thinking of a topic/ story Having the patience to plan	Understanding the information given Taking in enough information to do the tasks Staying interested	Having enough materials for their animation. Having a clear plan of their story. Having enough time to finish animating, add soundtrack and export file	Being interested in the work of other groups Paying attention Having confidence to comment in front of class	That they have completed the tasks That they have learned something That they have used their English skills
TEACHERS	Getting them to settle down & form pairs / groups easily Making sure the students are paying attention	Making sure the students are paying attention	Keeping the students on task	Making sure the students are paying attention	Having enough time for the students to finish up Moving the finished work onto the computer (having time and a simple plan)	Making sure the students are paying attention Keeping the discussion happening, and in an orderly way	That they are satisfied that the students have: Learned something completed the task Used their English skills
FACILITATOR	No particular challenges at this initial stage	Getting the students interested in the task Being convincing Giving all the information succinctly	Giving all the information succinctly Hanging back enough - only intervening when required Keeping the students on task	Giving enough information for tasks, to be done, but not so much that students get overwhelmed Explaining things clearly	Exporting and saving process is sometimes chaotic. Lots of students wanting help at once. Keeping the interest of students who have finished already	Trying to engage the students in discussion about their work	That he enables the students to achieve the desired outcomes. That he helps them feel comfortable using their English and not shy or when speaking and communicating in English. That he inspires students to animate further in their own time.

Fig 16. Co-Design Workshop Journey Map Part 2.

During the final stage of the Co-Design Workshop the participants again discuss together and suggest possible solutions for the challenges as identified and shown in the second Journey Map. Then these suggested solutions are filled in on the third Journey Map. This kind of collaborative, qualitative thinking is what was intended when the Co-Design Workshop was originally conceived, and is at the heart of the ethos of co-design and co-creation. An important element of Service Design in concept and in practice is the performing co-creation is the presence of those who represent the Stakeholders. (Stickdorn & Schneider 2016, 39.)

Possible Solutions To The Challenges Faced At Each Stage Of The Animation Workshop

	TEACHER'S INTRODUCTION TO LESSON	BRIEFING / PRESENTATION	PLANNING, SCRIPT & STORYBOARD	iPAD BRIEFING / HOW TO	ANIMATING, VOICE - OVERS & EXPORTING	GROUP REVIEW & EVALUATION	DESIRED OUTCOME
STUDENTS	Bullet points of main AWL touchpoints could be pre-written on whiteboard and pointed out to students. Clear verbal instructions and optional reminders to be given as needed.	Teachers should allocate pairs / groups wisely based on knowledge of the students. A relaxed staff demeanour may encourage students to feel comfortable asking questions.	Instructions must be clear and concise. A list of topic options would help those who need it. Importance of pre-planning whole story should be emphasised.	Give just technical the information needed to do the task. Briefing should not be overlong. An enthusiastic demeanour will help promote interest.	Spare materials should be provided in case students fail to bring their own. Set time windows for each stage to be given to students beforehand - to be lesson plan/instructions given at start of AWLs.	Relating animations made on the same theme together may promote inter-class empathy in critical discussion. Keep questions to students class-wide where possible.	That they have completed the tasks That they have learned something That they have used their English skills
TEACHERS	Remind students (more than once if needed) to be quick finding a partner. Reminders to also pay attention may be needed.	Teachers should be observant and vigilant. Reminders to pay attention may be needed.	If students stray from the task, remind them what is required. Clear goals needed for students.	Asking any students who may not be paying attention questions about the information.	Tasks should be realistic & achievable in the limited time available. Make test export before lesson. Make realistic lesson plan.	Could ask questions / raise discussion points as well as facilitator. Guide / prompt discussion & mutual feedback.	That they are satisfied that the students have: Learned something completed the task Used their English skills
FACILITATOR	Although no challenges at this stage identified yet, constant awareness & monitoring of own conduct in future is a good idea.	Always maintain enthusiasm for subject Use only the essential information. Practice presenting beforehand to see if revisions possible.	Practice presentation and get feedback from others with no prior knowledge. Practice will also improve "hangback" issue.	As more AWLs are given this will be honed. Practice explaining to someone with no prior knowledge to see if they understand the instructions.	A tech-savvy student can help his/her classmates. Student could be designated beforehand by the teachers who know them.	Students may be shy if situation unfamiliar to them. If so keep questions / topics simple and not too demanding.	That he enables the students to achieve the above objectives. That he inspires students to animate further. That he helps them to feel comfortable using their English and not shy or awkward when speaking and communicating in english

Fig 17. Co-Design Workshop Journey Map Part 3.

Outcome of Using the MethodOutcome of Using the Method

The Co-Design Workshop was a success. The Teachers understood the aims and working method of the co-design task. They considered carefully all the key factors when coming up with their opinions, and articulated their answers. The information generated was helpful towards achieving the three sets of desired outcomes as stated in the Journey Maps. For example, during the Animation Workshop at which this co-design workshop was aimed, the Teachers and Project Facilitator took care to remember the solutions suggested and implemented them in the Workshop lessons.

The main challenge to the running of the workshop was the limited time period that was available to the Teachers. This meant that things had to proceed quickly. However, all participants agreed that is was a productive exercise.

6.1.3 End-User and Stakeholder Journey Map

Method

A Journey Map is a graphical representation of a customer experience. Hence, these are more commonly known as customer journeys. In *The Service*, the student participant takes the place of the customer. They are called end-users as they are the ones around whom the service has been designed to benefit; to engage them in the project and allow them to use their skills and learn new ones. In a sense, the "End-result-users" of *The Service*. The making of a journey map is a way of recording and showing what happens as a person utilises a product or service and the reactions they make to these events (Curedale, 2013, 142).

Why the Method was Chosen

A Journey Map enables a service designer to get in touch with the aspects of a service that make up the overall experience (Curedale, 2013, 142). This method was chosen so that the experiences of the Students, Teachers, and the Project Facilitator / Leader could be studied and improved upon, for the benefit of all parties, and for continued future development across subsequent Animation Workshops.

The Desired Outcome of Using the Method

The desired outcome was to get a better understanding of primarily the students' experience and then of the other stakeholders, so that at every touchpoint in the service experience, the best service could be provided, and so that any challenges identified could be analysed and solutions sought.

Use of the Method

During the early stages of the research and design phase, copious notes were taken and insights gathered. This included all work leading up to and including instances of the Animation Workshop lessons themselves. Then, by analysing this material, the Journey Maps were created. Feedback from the Teachers and Students came from anecdotal evidence from the Workshop Lessons, and from the feedback received by the use of questionnaires given to both parties (6.1.5 and 6.1.6)

1st & 3rd Grade Animation Workshop - Journey Map   **Animation Workshop**   05 April 2019

JOURNEY MAP   PROJECT   EXPORT DATE

| Pre-Workshop Stage | Workshop Lesson 1 of 6 | Workshop Lesson 2 of 6 | Workshop Lesson 3 of 6 | Workshop Lesson 4 of 6 | Workshop Lesson 5 of 6 | Workshop Lesson 6 of 6 | Post-Workshop Stage |

Project Leader - Gerry Macken   PROJECT FACILITATOR'S JOURNEY

Gerry discusses project with Teacher D by phone initially, then meets with her and Teacher E. Workshop objectives decided and lesson plans made.
Presentation materials and flashcards made.

The following observations by Gerry are a combination of extracts from his personal diary and descriptions of actions taken from notes made after the workshop.

"The lesson went well, but was a bit disorganised as the classroom computer was incredibly slow. It wouldn't load a new page, so I couldn't log on to google drive to give my presentation."
Gerry covered the main points from memory instead.
"Despite the children having very little English language, everyone seemed to understand what was required of them and get on with the task. By the end of this first lesson, there were already a couple of complete experiments shown to me."

"The pupils were enthusiastic, and got on pretty quickly with their work. There were no major difficulties."
"Most of the work at this early stage was very fast, and the differences between frames was quite large. It would be nice to try to communicate to the pupils the idea of making the differences between frames more subtle, and therefore making the animations smoother. But generally, the lesson went well."

"By this stage all the pairs of pupils had an idea in place and had made significant progress animating their stories."

"In terms of the pupils working hard on their animations without any major problems, it went well. The pupils continued to work as they had so far."

"By the end of the fifth lesson all the pupils had finished making their animations and wanted to export them. Due to problems with the schools wifi network running slowly, there were some difficulties in achieving this."

After this lesson Gerry took some extra time to get all the animations off the ipads. At home he edited all them all together with music and titles in time for the last lesson, which was to be a "Movie Show."

"At the start of the lesson I greeted the class, thanked them for all their hard work and told them the agenda for the lesson. The teachers handed out popcorn to the pupils and I introduced the video. We watched it through once, and then again, stopping after each one. The pupils who made it were invited to say something about it in Finnish. If they wanted to they could say a few words about it in English too. Some did, and that was very nice to experience."

In the last lesson, an open-ended questionnaire was filled in by the pupils. This data was collected and analysed.
On the whole the lessons went well, the objectives were achieved and the children had fun, learned a little bit of English and how to make an animation. There were some technical issues, but a lot was learned about those issues and about interacting with the pupils and communicating with non-English speakers and very basic English speakers.
Gerry submitted his invoice to the teachers who processed it and advanced it to Turun Kielivirta for processing by Turku City Education Dept.

Teacher D - Tiina - Class 1E   TEACHER D'S JOURNEY

"I want to motivate the pupils as much as possible, so the assignment must be such that the pupils' own design and work is the focus."

"It was nice to see how excited all the pupils were and how they really wanted to make films and also learn some English. And how hard they tried to understand Gerry's English instructions. I think that the information Gerry gave was adequate and it was suitable for their age."

"I wanted to learn to make an animation and use iPads better. I also wanted to provide pupils a chance to speak and hear real English and learn about film-making. I thought this was an excellent chance to achieve the aims of the new curriculum."

"In the project, the project leader was really inspiring and encouraging the children, and even those children who sometimes have problems with motivation were highly motivated and task-oriented. This was also reflected in the pupils' output."

"I was really surprised how fantastic the animations were and how excited the pupils were about this project even though some of them haven't learned English at all."

"I think this project went well. The only problems we had were technical problems and some of them were unexpected like the Airdrop thing (cloud storage system)."

"I think that we could have done more before the filming so that the stories would be better and better planned. Pupils could write first and then tell their comments to each other in English. I noticed that some of them really wanted to use their English skills, but it was difficult because they hadn't planned what to say about it."

"I think we achieved the aim, that pupils get some experience of speaking and hearing English and they really notice that it is useful for them to try to learn some more. I really think this project gave them more self-confidence and courage to use English."

Teacher E - Marja Class 3A   TEACHER E'S JOURNEY

Teacher E advises Gerry that he should speak just English to the pupils, and not use any Finnish. "One face, one language."

"Gerry's instructions were clear, the children understood and started working without hesitation!"

"Maybe next time I would use more time with children for planning the story (before starting work with ipads)."

Teacher E continued to guide the children and help them when they needed help, as she did throughout the workshop. If the pupils didn't understand something Gerry said, both teachers and the two classroom assistants translated for them.

"it was good to see how Gerry made this all work...I think this was a very interesting project for me also."

"The activity was well received by both pupils and their parents. I learned new things, and it was nice to see the students doing really enthusiastic work. At the same time, we put the students familiar with the English language, and the third class pupils had access to a language that they had only been learning for six months."

"I think that almost everything went well. Last time there was a problem with how to send the animations to one iPad and it took a lot of time. Perhaps it would have been better to check the sending later on and work more with the children. But anyway, the children worked well and were excited!"

"Now that we have done this for the first time, I think everything went better than I could ever have imagined - and with such a big group! They are so proud of their productions!"

Mikko - 1st & 3rd Grade Persona   MIKKO - 1ST & 3RD GRADE PERSONA'S JOURNEY

Teachers Tell pupils about the upcoming project. They are looking forward to it.
(Childrens' names are changed and their comments translated from Finnish.)

"We went to the lower class to make animations. We were led by Englishman Gerry Macken. First he showed a couple of example videos. Then we were told about topics such as sports, summer holiday and imaginative characters. We chose the theme of imagination."

"It was taught by Gerry Macken and he had to speak English."

"We made animations of plasticine and legos. We also made paper for background animation. Our topic was the imagination story. Making animation was easy and nice and the animations became good."

"The soft toy movie was about the adventures of a mole and a squirrel."
"The Lego movie was called Pursuit. The pirate and the octopus were rescued from Joker's jail."

"Our group's biggest animation was 117 pictures. Yet it only lasted twenty seconds. Now I understand that really many pictures are needed to make a movie!"
"It was taught by Gerry Macken and he had to speak English."

"The animation was nice to do. At the same time, we learned English...Animation was really fun!"
"This movie had 121 images and it lasted 23 seconds. The shooting took 2 hours. I learned that making a movie does not happen in a short time."

Anna - 1st & 3rd Grade Persona   ANNA - 1ST & 3RD GRADE PERSONA'S JOURNEY

The teachers and Gerry's hopes for the children included:
Hopefully they would learn something.
Hope fully they would have fun!
(Childrens' names are changed and their comments translated from Finnish).

"We made movies with the 1E classmates. The first day we listened to how to do animations. we had to go to the Animations app and then had to take many pictures. For each picture, we had to move the toy a little bit.
I did not understand all that was told in English but I understood however."

"First, we sketched the different phases of the flower. We took just five pictures, but it looked too fast. So we did a new one. We took five pictures of one flower stage and made three more flower stages. It came pretty good, but we wanted to do it even better next time. we made new flowers from plastic and it became much finer and more live looking."

"First, a plan, accessories, such as plastic, legos, paper and necessary goods are needed to create an animation. We were taught by Gerry Macken, a professional. He spoke English. An animation requires a tablet and animation application. My animation came good. I think making animation was fun."

"The topics were summer, sport or imagination. Me and Emma chose the summer. Gerry showed how the animations are made. He is English and occasionally it was a bit difficult to understand what he said. We made with Emma a design for a flower that opens."

"Many pictures were taken in the animation, then the pictures went together and turned into a video. Making the animation was fun and I did well in my opinion."
"My and Leena's theme was spring. We made flowers of plastic that combine and became one big flower. Then the flower died and it again became three small flowers. We were led by Englishman Gerry. I am pleased with Leena's and my work."

"Making the animation was fun, I would like to do more."
"Making the animation was nice, it was a pity that it was done in only these occasions. I would like to do more."

Teacher D - Tiina - Class 1E / Teacher E - Marja Class 3A / Mikko - 1st & 3rd Grade Persona / Anna - 1st & 3rd Grade Persona / Project Leader - Gerry Macken   EMOTIONAL JOURNEYS

Teacher D - Tiina - Class 1E / Teacher E - Marja Class 3A / Mikko - 1st & 3rd Grade Persona / Anna - 1st & 3rd Grade Persona / Project Leader - Gerry Macken   DRAMATIC ARC - SATISFACTION

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Turku University Of Applied Sciences | Gerome Macken 1602110

8th & 9th Grade Animation Workshop - Journey Map Part 1   Animation Workshop   05 April 2019
JOURNEY MAP   PROJECT   EXPORT DATE

| Pre-Workshop Lesson Stage | Start of workshop A | PF Presents Project | Idea, Planning, Script & S... | iPad App - Briefing | Students Animate | Making A Voice-Over | Saving And Exporting |

Project Leader - Gerry Macken   PROJECT LEADER'S JOURNEY

| Works with the teachers to plan the lesson. This includes a co-design workshop and a lesson planning meeting. With Teacher, comes up with lesson plan. | Sits quietly and projects an air of calm confidence. Watches and takes in everything going on around him, in order to learn as much as possible. | Gets the students interested in the task, tries to be convincing, and to give all the information succinctly without wandering from the point. Gives a presentation explaining all tasks. In second and subsequent workshops, animations from the first workshop are shown as part of the presentation. It gives the students a good idea of the kind of thing to aim for. | Encourages the students and helps any that need guidance, but for the most part lets them get on with it. They are on the whole quite self-sufficient and get on with the task. Does not want to break their concentration by interfering if it's not needed. Any students that seem distracted or not progressing are encouraged with a brief "how's it going? | When all students have some kind of basic idea, script and storyboard, a brief run-through of the iPad app is given. Instructions on downloading (if not already downloaded) the app, it's basic functions and how to animate, play back, copy and delete frames are given. He is careful not to give too much extraneous detail, as only the basics are needed. the priority is that students get animating ASAP. | He encourages the students and helps any that need guidance, but for the most part lets them get on with it. They are on the whole quite self-sufficient and get on with the task. Does not want to break their concentration by interfering if it's not needed. Any students that seem distracted or not progressing are encouraged with a brief "how's it going? Sometimes a student may have a question about the animation app, but on the whole they get the idea and are using the iPads well. | Sometimes a group of students will have a story that takes so long to animate that it cuts down the time they have for recording a voice over or other sounds. In some cases this voice-over stage seems a little like an after-thought, but there are also some well thought out and executed soundtracks. The limitations of the app and the busy classroom environment mean that some groups prefer to go out to a quiet room to record their sound. | Although no negative survey feedback was received from students regarding the saving and exporting of animations, this was often a challenge, due to there being several different methods available to do so (for example save locally to iPad and then email to a teacher, or upload directly to school One drive account). Time is also a factor as it takes several minutes to do each one, and keeping track of the status 20 iPad's could sometimes be a handful. This stage still needs some strategising. |

Project Leader - Gerry Macken   PROJECT LEADER - THOUGHTS AND FEELINGS

| Quiet anticipation mixed with a few nerves about giving a good presentation. | He is excited but nervous that all planning will go well & that he covers everything | Is conscious of not talking too much, but getting the point across articulately and concisely. | Happy that the students seem to have got the idea and are getting one with creating their story. | Is conscious of not talking too much, but getting the point across articulately and concisely. | Is happy that they almost all seem happy and are busy producing something. Eager to help those who don't seem 100% happy or who may need help. | It's a shame that more students don't want to record themselves speaking a lot of English. Often the finished voice overs are quite minimal. But something is better than nothing! | The technical difficulties that sometimes hamper the export process are frustrating. But everyone is trying their best and the attitude of students who are helping each other is encouraging. |

Teacher D - Tiina - Class 1E   8TH & 9TH GRADE TEACHER'S JOURNEY

| Asks students to bring a small object with them from home for using in their animation. Participates in Co-design workshop to identify and tackle possible challenges in Animation workshop lessons. During lesson planning meeting, suggests list of possible themes for students to choose from: when making their story. Assigns students into pairs, for example, in the case of the 8th Grade Dutch exchange group, 1 Finnish student and 1 Dutch student. | Is keen to get the students settled and get the project underway as soon as possible, as is aware that time is always short. Encourages the students to settle down and pay attention so that she can introduce the lesson and hand over to Gerry so that he can continue with the first part of the project. | Watches the presentation with the rest of the class. Keeps her "Teacher Radar" for any students not paying attention, or any other issues. | As with at all stages where not directly involved, is constantly monitoring students and giving help where needed. | Watches the iPad briefing. Hands out the ipads to the students, one per pair. Makes a note of which students have which iPad, which are all individually numbered. | "The students know what to do and they got help quickly to overcome difficulties." | Monitors students' progress. Observes. Give help and advice when needed. Also helps and advises the P.L. if required | Helps with the saving and exporting process. This can be a somewhat hectic stage in the workshops, as there is usually not so much time left in which to help up to 20 pairs of students at various stages in their saving and exporting process. |

Veera 8th & 9th Persona   8TH & 9TH GRADE FEMALE STUDENT'S JOURNEY

| "Before you did the workshop: what were your expectations of it?" I was looking forward to it - 50% I was not looking forward to it - 18.8% I had no expectations either way - 31.3% (based on 16 responses) When discussing the upcoming animation project with their teachers... | The students are on the whole very attentive and seem engaged in the process of listening to the project being outlined and the Project Leader being introduced. | 2017: "How was The Information given?" Very clear - I knew what I was supposed to do - 43.8% I knew what I was supposed to do, but not straight away - 18.8% I wasn't quite sure what I was supposed to do at first, but I understood after a while - 25% I wasn't ever sure what I was supposed to do - it was unclear - 12.4 (2 students) (based on 16 responses) | If You Agree That You Learned Skills That You Could Use In Another Kind Of Task, What Were Those Skills? "Use of English, teamwork." "My creativity and coming up with an idea in a small amount of time." "Speaking English, working together." | "Gerry spoke clearly and not too fast" - 85% agreed completely 15% slightly agreed. (based on 40 responses) "The Animation App was easy to use" - 77.5% agreed completely 20% slightly agreed 2.5% slightly disagreed (based on 40 responses) | "I was happy with the animation I made" - 35% agreed completely 42.5% slightly agreed 20% didn't know either way 2.5% slightly disagreed (based on 40 responses) | "The Animation App was easy to use" - 77.5% agreed completely 20% slightly agreed 2.5% slightly disagreed (based on 40 responses) | "My partner and I worked well together" 67.5% agreed completely 22.5% slightly agreed 5% didn't know either way 2.5% slightly disagreed 2.5% disagreed completely (based on 40 responses) |

Joonas - 8th & 9th Grade Persona   8TH & 9TH GRADE MALE STUDENT'S JOURNEY

| ...the students specifically request a different workshop partner than their partner assigned for the week-long exchange | "Before the workshop, what were your expectations of it?" "I was looking forward to it."50% "I was not looking forward to it." 18.8% "I had no expectations either way." 31.3% (based on 16 responses) | 2018: "I Understood The Aims Of The Workshop And What I Was Supposed To Achieve" 62.5% agreed completely 30% slightly agreed 7.5% didn't know either way (based on 40 responses) | "It was creative." "I was nice to do the animation with my group" "I could so something I have not done before" | "The information given was clearly presented" 80% agreed completely 15% slightly agreed 2.5% didn't know either way 2.5% slightly disagreed (based on 40 responses) "The information given helped me make my animation" 57.5% Agreed completely 37.5% Slightly agree 2.5% I didn't knew either way 2.5% Disagreed completely (based on 40 responses) | The best thing about the project was: "Making the animation movie" "To take the pictures" "Making the animation itself was fun, even though it's a little tiring." | "We couldn't hear the sound when we made it, so it was hard to know if it was okay." | "The teamwork was democratic" 70% agreed completely 17.5% slightly agreed 2.5% didn't know either way 7.5% slightly disagreed 2.5% disagreed completely (based on 40 responses) |

Joonas - 8th & 9th Grade Persona / Veera 8th & 9th Grade Persona / Teacher D - Tiina - Class 1E / Project Leader - Gerry Macken   EMOTIONAL JOURNEYS

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The preceding figures are: Fig 18. First and Third Grade End-User and Stakeholder Journey Map, Fig 19. Eighth and Ninth Grade End-User and Stakeholder Journey Map - Part 1, and Fig 20. Eighth and Ninth Grade End-User and Stakeholder Journey Map - Part 2.
They are also featured in Appendices 4 and 5.
In the Journey Maps, the percentage shown next to students' answers shows how many of the students who were asked that question gave the answer indicated.

Outcome of Using the Method
The process of creating these Journey Maps allowed each stage of the Animation Workshop lessons to be scrutinised in detail and to represent the experience of the three sets of participants and their experiences and insights. This information was of value and influenced the planning and execution of subsequent Workshops..

6.1.4 Service Blueprint

Method
A Service Blueprint is a diagram that shows the stages of a service, and the customers or

end-users' interactions with it. However, what makes it different from a journey map and gives it extra value is that it also shows the behind-the-scenes processes and actions taken by the service provider and other stakeholders. A Service Blueprint enables an organisation to investigate all aspects that are a vital part of the management and creation of a service. (Shostack 2016, 300.) The Service Blueprint was first used as a way to simulate the processes of a service from the viewpoint of the customers of that service by Lynn Shostack (Sparagen, 2008, 3).

Why the Method was Chosen and the Desired Outcome

A Service Blueprint was chosen as a method because, by showing in a clear and simple diagram the backstage processes alongside the front stage actions of the Students, Teachers and Project Leader, the whole process of creating and conducting the Animation Workshops could be better understood. This would help not only in the initial research stages, but also in later iterations of *The Service*, when various elements are being designed and implemented. It is a method that has versatility, useable both for making improvements in a service and in the practice of innovation (Bitner 2016, 300).

Another reason for making a Service Blueprint was for it to serve as a companion to the End-User Journey Maps that were made. A Service Blueprint could provide those previously described extra layers of detail, that describe the backstage processes and actions taken.

The desired outcome of using this method was to have a better understanding of all the processes and actions taking place during the execution of the Animation Workshops themselves, and of all the preparations and processes happening behind the scenes; before, during and after the Animation Workshop Lessons.

Use of the Method
A Service Blueprint was drawn up. This was based on all the research done, all the Animation Workshops that had so far taken place, and all the knowledge and insight that had been gained as a result. Unlike the End User Journey Maps, of which there are two versions to show the differences between the two age-groups of students, there is only one Service Blueprint. This is because of its main objective being to show the backstage support processes involved, which were the same for all Workshops.

Touch Points: Pre-Service Phase   Service Phase ->|Post/Service Phase

Physical Evidences	User Awareness Of The Service	Start Of User Participation & Interaction With The Service	Continuation Of User Participation & Interaction With The Service	Intervening Time Between Penultimate And Last Workshop Lesson	End Of User Participation & Interaction With The Service	Post-Service Phase For All Stakeholders
	Classroom, white board/screen, teacher's computer, desks, chairs etc. list of themes as paper handouts. Students and Teacher present.	Classroom, desks, chairs etc, white board/screen, teacher's computer, projector, audio speakers, list of themes as paper handouts (if applicable), materials to be animated, Pens and paper, other art materials (if applicable). Students, Teacher and Project Leader present.	Classroom, desks, chairs etc, white board/screen, teacher's computer, projector, audio speakers, list of themes as paper handouts (if applicable), materials to be animated, Pens and paper, other art materials (if applicable). Students, Teacher and Project Leader present.	There is no physical evidence of this intervening time, except for a lack of physical evidence.	Classroom, desks, chairs etc, white board/screen, teacher's computer, projector, audio speakers, list of themes as paper handouts (if applicable), materials to be animated, Pens and paper, other art materials (if applicable). Students, Teacher and Project Leader present. Printed questionnaires for Users	There is no physical evidence of this post service phase, except for a lack of physical evidence.

User Actions	Hearing about the Animation Workshop	Participation In Animation Workshop Lessons	Participation In Animation Workshop Lessons	Intervening Time Between Penultimate And Last Workshop Lesson	Review & Appraisal Lesson	Post-Service Phase For All Stakeholders
	Students listen to the Teacher explain about forthcoming Animation Workshop. They ask questions, make comments, discuss between themselves and start to think about the project.	Listening, watching, thinking, communicating in English. Using all their cognitive, problem-solving & creative skills...	..over the course of the workshops. Critical thinking & teamwork, time management, understanding & interpreting of the project themes, social & interpersonal skills.	The Students take no definitive action related to the service, except that they are thinking about and looking forward to seeing theirs and their classmates' work in the forthcoming final review and appraisal lesson.	All animations are watched and discussed in front of the whole class. The Students convey something about their work. Communication and critical thinking used. Student questionnaires are filled in and handed back to Teachers or Project Leader. Students' interaction with The Service ends.	There are no user actions for this post service phase.

Line Of Interaction

Frontstage	Spreading Awareness To The End-Users	Start Of Interaction Between Students, Teachers And Project Leader	Continuation Of Interaction Between Students, Teachers and Project Leader	Intervening Time Between Penultimate And Last Workshop Lesson	End Of Interaction Between Students, Teachers and Project Leader	Post-Service Phase For All Stakeholders
	Teachers give information to the End-Users (Students). List of themes to choose from handed out (if applicable). Questions answered. Instructions to bring objects and/or toys to animate given.	Main stage of animation workshop lessons begins. Introduction to project, presentation, Students guided in how to make animations. Teachers, Students and Project Leader all fully active.....	...students make their animations, add sound and/or voices and export their finished work. Finished animations saved /exported/emailed to Teachers and/or school cloud storage.	The Teachers & Project Leader take no front stage action related to the service, except that they are thinking about and looking forward to seeing theirs and the Students' work in the forthcoming final review and appraisal lesson.	Video of students' work played & Project Leader engages Students in discussion and review of their work and that of classmates. Teachers also involved in flow of discussion. Project leader appraises Students work & gives questionnaires to be filled in.	There are no front-stage activities for this post service phase.

Line Of Visibility---

Backstage	Planning	During The Workshop Lessons	Animations Sent to service provider	Review & Appraisal Lesson Prepared	Review & Appraisal Lesson	Post-Service: Data Collection & Admin.
	Commissioners of Service (Teachers) and Service Provider (Project Leader) have initial meeting, subsequent discussions, co-design workshop, and lesson planning meeting. Service Provider makes lesson content and tests animation software. Teachers approve content and book school iPads.	Any communication needed between Teachers & Service Provider is done for purpose of any practical arrangements or any adjustments needed to any matters.	When Students' animations are finished, Teachers emails them to Service Provider in order to edit together into a compilation in intervening time between end of animation making and last lesson of Animation Workshop - review and appraisal.	Project Leader gets all animations from Teachers and edits them together. Make a finished presentation with titles, music etc. Makes questionnaires for Students to complete in review & appraisal lesson.	Just before Review & Appraisal lesson starts, Project Leader tests that compilation video will play and that classroom AV equipment is working. Teachers assist in this if necessary.	After review & appraisal lesson Teachers give completed student questionnaires to Project Leader. Project Leader submits invoice to school who sign it off and pass to Kielivirta who process payment to Service Provider.

Service Provider & Stakeholder Interaction---

Support Processes	Systems of Planning & Preparation	Backstage Systems During Animation Workshop Lessons (Service Phase)	Backstage Systems During Animation Workshop Lessons (Service Phase) Edit [x]	Backstage Systems In Between Penultimate And Last Animation Workshop Lesson (Service Phase)	Backstage Systems At End Of Animation Workshop Lessons (Service Phase)	Backstage Systems At Post-Service Phase
	Email and phones used for communication. School booking system for iPads used. iPads charged. Presentation & other office software used to make lesson content. Animation app used to test usability and shape instructional material	Any communication needed between Teachers & Project Leader in between Workshop lessons done by phone & email, or in person at meetings.	Email used for transfer of animations to Service Provider. In some cases USB drive used. In others service provider manually saves, exports & sends animations from iPads to his email.	Service Provider. makes compilation video of all animations on home computer. Adds music, sound effects & titles to a complete programme of that class's work. Uploads video to a youtube channel, viewable only by Teachers & Students to whom link is provided. Writes students questionnaires on home computer, prints them out.	Checking/readying of classroom AV facilities.	Computer software used to make invoices. Documents emailed. Phone calls made. Student questionnaire info entered into home computer. Data plotted as graphs for use in thesis study. Questionnaires emailed to Teachers and returned by email. Notes made & workshop lessons analysed for strengths, challenges etc. Data used to inform future iterations of Animation Workshop design & creation.

Fig 21. Service Blueprint

The use of the Service Blueprint allowed all levels and stages of *The Service* to be scrutinised in detail, and provided insights which help subsequent development of *The Service*.

6.1.5 Student Questionnaires

Method

There are two types of questions asked in questionnaires, quantitative and qualitative. Quantitative questions collect statistical data (Curedale, 2013, 44). They are good for large groups, such as a class of students. They tend to be closed-ended questions. A closed-ended question is one to which the answer is one thing or another, the most obvious example being "yes" or "no." Qualitative information helps when seeking to understand the everyday experiences of people. (Curedale, 2013, 43.) There is much about *The Service* that is based on how the users react, how they feel when participating in the project. These kinds of user experiences are qualitative; they are qualified by an emotional response.

Why the Method was Chosen

Questionnaires are an easy and direct way to get good data, straight from the users of a service. This data is valuable. It can for example be used to illustrate key touchpoints of a customer journey, and accurately measure the effectiveness of a service. By examining the answers given to survey questions, a service provider can know how well the service is working, or what challenges still need to be addressed.

The Desired Outcomes of Using the Method

The first was to identify the strengths and weaknesses in *The Service* and use that data to make improvements for the future use of *The Service*. The second was to use the students' responses to the survey questions as a way of measuring whether the desired objectives of *The Service* and all stakeholders were being achieved.

Use of the Method

Questionnaires were written and given to the students at the end of their experience of *The Service*. A summary of the facts and figures of the questionnaires used is as follows:

- 4 questionnaires given to 8th and 9th grade students from 4 workshops
- Similar questions in each questionnaire. In total, 36 quantitative questions with between 4 and 40 respondents
- In total, 11 qualitative questions with between 4 and 40 respondents
- 3rd Grade students wrote qualitative feedback in Finnish, translated into English later

Summary of Results

This method generated a very large amount of data. Therefore, these results are a summary. All the results are featured as Appendix 7.

An example of a result graph of a quantitative question given to forty 8th grade, Finnish and Dutch students:

I Enjoyed The Animation Workshop Project

Slightly Disagree 2.5%
I Don't Know Either Way 7.5%
Agree Completely 50.0%
Slightly Agree 40.0%
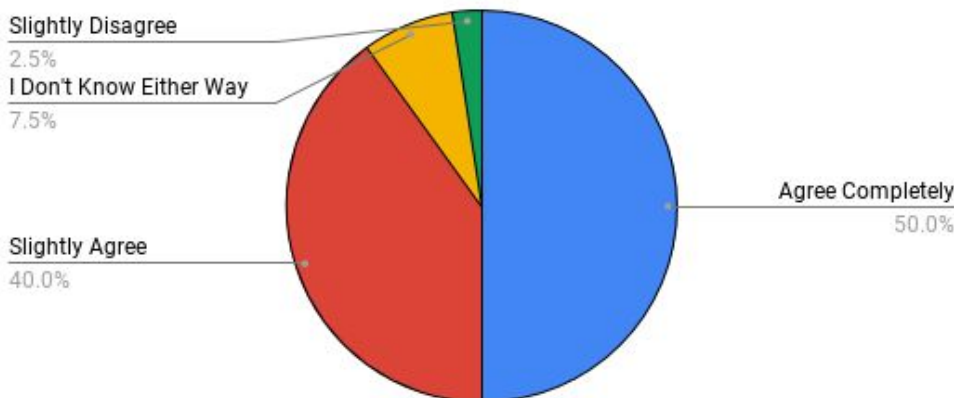
Response	Respondents	Percentage
Agree completely	20	50
Slightly agree	16	40
I don't know either way	3	7.5
Slightly disagree	1	2.5

Fig 22. Example of Student Questionnaire Results Graph

Some Other Results

When the same group were presented with the statement: "The information given was clearly presented", 80% agreed completely, 15% slightly agreed, 2.5% did not know either way and 2.5% slightly disagreed. To the statement "The workshop was a good way to use my English skills, 47.5% agreed completely, 32.5% slightly agreed, 7.5% did not know either way, 10% slightly disagreed and 2.5% disagreed completely. A different Questionnaire given to a different class of twenty 8th grade Finnish students got much fewer responses. When presented with "I didn't want to speak English in front of the whole class", 50% disagreed strongly, 16.7% were neutral and 33.3% agreed. This is based on a total number of 6 responses.

The Questionnaires gathered some valuable results. A lot of data was generated, which was a challenge to manage, but the results provided an interesting mixture of answers, with more positive responses overall than negative ones. The method proved to be a good way to measure the functionality and effectiveness of the service. This will be discussed more fully in chapter 7.1.

6.1.6 Teacher Questionnaire

This method, the reasons for using it and how it was used are the same as for the student questionnaires, and this information is detailed fully in the previous chapter. Five of the Teachers who participated in The Animation Workshop lessons were given 7 quantitative questions and 20 qualitative questions. In addition two teachers from the first and third grade Workshop at Vähä-Heikkilä school each wrote qualitative feedback.

The results are as valuable as those from the student questionnaires. Whereas the student Questionnaires tried to uncover the students feelings about the outcome for them and their involvement in the project, the teacher questionnaires had more qualitative questions. These were often concerned with the pedagogical value of the project, and the perceived outcomes and opinions of the project. This was done in order to gain insight about the effectiveness of the project and how it went about doing what it did. This will also be discussed in more detail in chapter 7.1.

Examples of Qualitative Responses Received

When asked If the Animation Workshop fulfilled the needs the Teachers had mentioned in an earlier question, among the responses received was the opinion that they met all of those needs and more, such as the Students' collaborative and social skills. It was also said that the objectives of the local OPS curriculum were well met, and that the Students could have used the target language more than they did, although that did vary among the students in the class. When asked about the role of a Project Leader, responses included the opinions that a project leader should know clearly what they will ask of the Students, for they view the Project Leader as a Teacher, that the Project Leader inspired the students, even the ones that occasionally have poor motivation, and that a good Project Leader should guide and instruct the Students and ensure that each group member is equally involved in the tasks.

All five teachers said that the Animation Workshops were successful, that they went well. When the statement presented was "I would recommend the service to other Educators because:" one of the respondents wrote:

"1. It was well-planned, 2. It was interesting for the students, 3. It was different, 4. It had meaning, 5. It was fun and the students probably didn't even realize they were learning."

The use of the Questionnaire method with the Teachers provided many valuable insights which can be used when planning future workshops and developing *The Service* further. Their opinions and suggestions about the challenges faced are of value when it comes to working on, solving and strategising around those issues, and the positive feedback given is a vindication of the areas in which the Animation Workshops succeeded. The full Questionnaire and all results can be found in Appendix 8.

6.2 Summary of Case Study: Animation Workshops in Three Schools In Turku, January 2017 - April 2018

Introduction

Between 20th January 2017 and 19th April 2018, six sets of animation Workshops were given at three schools in Turku. This chapter will explain what was done and when. Demographic information about the students, and each different workshop situation will also be given. This chapter will describe how the workshops went. This chapter is a summary based on the case study project diary. The project diary was written as a day-to-day diary, often in an informal style. So much was written over such a long period of time, that upon review it has been deemed to be unusable in that form, due to its disjointedness and inclusion of too much extraneous material. It was decided therefore that a distillation of that, featuring only the most relevant material should be summarised here.

Workshop 1 20.01.2017 to 31.01.2017 Luostarivuori School, Turku 9th Grade English Class Number of students: 24 Number of workshop lessons - 6 Standard classroom Teacher: A	**Workshop 2** 26.01.2017 to 31.01.2017 Luostarivuori School, Turku 7th Grade English Class Number of students: 20 Number of workshop lessons - 4 Art Classroom Teacher B
Workshop 3 22.02.2017 to 03.03.2017 Luostarivuori School, Turku 8th Grade English Class Number of students: 20 Number of workshop lessons - 3 Standard classroom Teacher C	**Workshop 4** 21.03.2017 to 21.04.2017 Vähä-Heikkilä School, Turku 1st (18) and 3rd (22) Grade Classes Number of students: 42 Number of workshop lessons - 6 Standard classroom Teachers D and E
Workshop 5 08.05.2017 to 11.05.2017 Puolala School, Turku 2 x 8th Grade Classes Number of students: 48, split into 2 groups Equivalent number of lessons per group: 6 Art classroom Teachers F and G	**Workshop 6** 17.04.2018 to 19.04.2018 Puolala School, Turku 2 x 8th Grade Classes Number of students: 44, split into 2 groups Equivalent number of lessons per group: 6 Art classroom Teacher G

Fig 23. Table Of Animation Workshops Conducted In The Case Study

Student Demographics
All of the Students in all workshops were Finnish. In addition, the Finnish Students in Workshops 5 and 6 at Puolala school were joined by their counterparts from a School called Het Pontes Lyceum, from the city of Goes in the Netherlands. The two schools have been participating in student exchanges for several years and workshops 5 and 6 were timed to coincide with their visit.

The Student participants of five of the six workshops were of grades 7, 8 and 9, meaning that the ages of these students was between 13 and 16. These Students had been learning English in school for at least 3 or 4 years, and as much as 7 years. Their English skills in comprehension and communication were highly developed; they were able to absorb, interact and express sophisticated ideas and information.

The Students of Workshop number 4 were two classes from grades 1 and 3, meaning that their

ages ranged between 7 to 10 years of age.

Dutch and Finnish Students working Together in a Shared Foreign Language

In Workshops 5 and 6, Each of the two nationalities of Students speaks a native language that the other does not. Both classes have English language skills in common, at a fairly advanced level. Therefore, as the Students were grouped together in pairs of one Finnish and one Dutch Student, in order to participate successfully in the project, the had to communicate in English with each other.

How the Students Responded to / Worked with the Project

Most Students in all classes seemed interested in the subject and worked diligently on the task of making an animation. Within the 7th, 8th and 9th grade classes, there were a few Students who seemed interested at first, and then seemed a little bored. The Workshop in which this seemed most prevalent was number 3, the 8th grade workshop which lasted for three lessons.

In most cases, once the Students knew what they had to do and had some understanding of the use of the iPad app, they were fairly good at proceeding on their own, and did not need much help from the Project Leader, except when he answered a few questions here and there.

In all workshops there were many Students who showed a high level of creativity and industry. One example of this was the pair of 7th grade students who used the whiteboard in the art class in which Workshop 2 was held as a "canvas" on which they animated drawings with which they interacted, taking frames of themselves standing in front of the board. Another 7th grade pair of Students made good use of coloured paper and card to illustrate and animate city buildings through which a fire spreads. The pair's animation showed an understanding of movement and sequential development. There are other good example of animations that worked well from all workshops. Although the completion of the animation task was a requirement, a good finished result was not as important an objective as whether the Students engaged with and enjoyed the project and used their English skills.

How Environment Played a Part

Workshops 2 and 5 were held in Art classrooms. This meant that there were more materials on hand which helped the students to use their imaginations. In addition, the desks in these rooms were arranged in small squares as opposed to the formal rows of desks in the "standard grid" classroom arrangement. This helped promote the interactive project-based atmosphere that was aimed for in all workshops. Whether or not this "standard gird" desk arrangement affected Students' creativity and by how much has not been tested in this project. However, in workshop 4 (grades 1 and 3), in which the standard grid arrangement was used, the Students were not encumbered by this.

Differences in Student Demographic Resulting in Different Approaches to Project Leadership

Workshop 4 at Vähä-Heikkilä School (VHK) represented a new challenge in a number of ways. The Pupils participating in the workshops at VHK were of grades one and three. Therefore their educational needs were different, requiring a different approach in class.

Another interesting fact was that this class consisted of two groups together, the first grade class and the third grade class. The third grade Pupils - being older and more experienced than their first-grade counterparts - act as mentors or helpers. It is a kind of "buddy system" that has benefits in the way the pupils work and interact with each other. The other fact that made the VHK workshops so interesting and challenging from the service provider's perspective, was that the first grade students had no previous English language learning experience, and the third grade Pupils had only been learning english for approximately six months at the time of the Workshop. This required a different approach to how the project was presented and instructed.

The Project Leader used English as his language of instruction. He had been advised to do so by another Teacher at the same school who was also a member of Turun Kielivirta, and Teacher E, of class 3A who would be participating in the Workshop. Her advice "one face, one language" was followed. As a result the Project Leader used a method of physically demonstrating the tasks using actions and speaking slowly, clearly and with simple words. He was able to communicate the concept of the activity and to show how to use the animation functions on the iPad. In addition to the two classes' Teachers, D and E, there were also two teaching assistants present who were able to help any of the pupils that needed extra assistance. If a pupil was unsure of what to do, this assistance was given by the Finnish staff using a few words of Finnish. This strategy worked, and the pupils not only performed the tasks well, they had fun while doing so.

Unlike the Workshops given to older students, the young learners of Workshop 4 were not obligated to speak any English that they might know, but at the end of the project during the group review lesson any who chose to were invited to say any words they knew in English connected to their animations. This did elicit some responses, such as "Swimming" or "Flower."

The Project Leader's Interaction with the Students - grades 7, 8 and 9

Talking to young people was something that at the beginning of the whole project, the Project Leader did not have a lot of experience in, in a professional setting. However, common sense was used and The Project Leader spoke to the students as he would speak to any adult. After a while, The Project Leader soon felt comfortable speaking with the students on their own level, and as the workshops progressed and more experience was gained, this was not an issue that was given much more conscious thought.

Dealing with Moments of Student Disinterest or the Tendency to Misbehave

Even within a group of Students who are on average well behaved, there are inevitably going to

be a few students who, for whatever reason, are going to misbehave from time to time. In these instances, it is the duty of the Project Leader, Teachers and other staff in the classroom to try and keep this from happening, or at least minimising these occurrences. In order to do this is, it is important to try to understand the reasons why some Students misbehave from time to time, and to strategize ways in which to:

A) Keep Students engaged enough in the activity that they don't get bored or distracted and therefore misbehave in the first place, and
B) Deal with these incidents when they occur with the minimum of fuss and disturbance to other students

An example of this occurred in Workshop 3, in which there were some Students who were perhaps slightly bored or not as enthusiastic about the activity as most of their classmates (about 4 to 6 out of a total of 20 students). There were however, no serious incidents in any of the Workshop lessons.

Technical Challenges

The biggest challenges faced during the workshops were technical ones. Sometimes the classroom computers used to show the presentation material were slow to respond. In Workshop 4 it was so slow as to be unuseable, and the Project Leader had to improvise and tell what he knew from memory. This had the unforeseen benefit of cutting down any information that may have been superfluous. For Pupils of a low level of English comprehension, this aided the situation, for the Project Leader had to concentrate on only the most basic information needed, and in very simple terms. Body language and the use of diagrams also helped.

Another technical problem occurring frequently in the workshops involved the exporting of finished work from the iPads. This was due to there being a few different ways to do this, sometimes being composed of a number of different steps, or using email or the schools' cloud drive. Sometimes slowness of a school's network speed also hindered the process. Although this stage of the work was always at the end of a lesson, on some occasions it took up too much time, meaning that the Project Leader had to stay behind and finish the process.

It was worked out that a way to deal with this was to try and allow for more time when planning a lesson, and to involve the Students. On several occasions a Student who was familiar with the technical aspects of saving and exporting the animations was enlisted to help their fellow students in this task. This way, another part of the process became a participatory factor in the learning process; a learning by doing experience in which the teachers and project leader also benefited from.

The Workshops fulfilled their objectives. As shown by the questionnaire results gathered, the Students got something positive from the experience, and the teachers felt that the Workshops

fulfilled the aims and objectives previously discussed. This will be dealt with further in chapter 7, The conclusion.

7. Conclusion

Answering The Research Questions:

How can The English Language Animation Workshop Service be developed and implemented using service design processes and methods?

What are the challenges and other factors that need to be considered in The Service, and how can they be addressed?

This thesis has shown that it is possible to develop and implement a service of this kind using Service Design methods and tools. Those methods were Benchmarking, Co-Design Workshops, End-User And Stakeholder Journey Maps, A Service Blueprint, Student Questionnaires and a Teacher Questionnaire. Theses methods were carried out using an approach based on Action Research And Prototyping. It can be shown that these methods resulted in a service that fulfils the objectives of the Students, Teachers, Project Leader and other stakeholders, based on the following evidence:

The Animation Workshops provided a project-based activity that engaged students and allowed them to actively participate in progressive learning methods, such as incidental learning and multidisciplinary learning. They worked on a project that was novel, stimulating and creative. They learned new skills and used their existing skills in English language communication. They used technology in a learning environment. These things were used not for their own sake, but in order to achieve a predetermined goal and produce a concrete result, a stop-motion animation.

These achievements also fulfilled the earlier-stated requirements of The National Core Curriculum for Basic Education and showed that a project of this kind is a viable option that can complement traditional learning frameworks and provide value for Students, Teachers and other stakeholders.

How this was Done - a Summary of the Process

From the starting point of the author's previous skills and experience with the English language and stop motion animation, discussions were held with a teacher and the idea to make a workshop-based activity formed. Combined with background research about the Finnish education system, language learning and service design methodology, the service began to take shape. An observation of an English lesson using a traditional teaching method was observed, and three different organisations were benchmarked in order to gain insight and inspiration. This lead to the establishment of the four main aspects of The Service as described in the frame of

reference (2.2). While conducting early iterations of The Workshops, the insights and experience gained help shape the development of the workshops and how they were carried out. A co-design workshop and end-user and stakeholder journey maps enabled strategic planning and idea development which improved the workshops and helped address challenges such as technical aspects with the animation technology and the way in which interaction with the Students (end-users of *The Service*) was developed and refined. In addition, working with different demographics of end-users enabled the testing of different ways of presenting and leading the workshop activities. The making of a service blueprint enabled the scrutiny of all the processes and actions that occur around and within the service, both on-stage and off-stage and at all times; before, during and after the service period. This helped to understand and develop the service, now and in future iterations. Subsequent experience and insight enabled the Journey Maps and Service Blueprint to be refined and redeveloped, and the use of Questionnaires for Students and Teachers also helped to improve service development and implementation, as well as to measure its performance and effectiveness in achieving its objectives.

7.1 Discussion

This chapter will discuss how the Animation Workshops went, how successful they were, and will answer the second research question, "What are the challenges and other factors that need to be considered in *The Service*, and how can they be addressed?" This will be shown by looking at anecdotal evidence from the animation workshops and the way in which the Service Design methods that were chosen were used.

7.1.1 What Went Well

The idea of doing a workshop project where students learn to make stop-motion animation and are communicating in English has been well received by Teachers. Once the initial Workshop was underway, other teachers at the same school showed an interest and further Workshops were requested. The idea was novel, and those Teachers who observed could see that the Students were on the whole engaging well with the project and demonstrating their creativity, problem-solving and team-working abilities. The prospect of working completely in English was a challenge for Students, but one that the majority met well and thrived in. Turku is a small city and word spread among Teachers. This was one of the factors that lead to Workshops being given in the two other schools subsequently to those Worskhops given at the first school worked with, Luostarivuori School.

Being a Project Leader and instructing a group of young people was something new for the author. He learned about classroom dynamics and this had a positive effect on The Workshops. For example, it was learned very early on that once the students knew what to do and were proceeding, that the project leader should hold back somewhat and let them get on with the tasks. One should offer advice and assistance only when it is asked for and not interfere by asking "how's it going?", as that can distract the students and break their creative flow. This is an

example of how learning to trust one's instincts as a project leader helps The Workshop lessons proceed more smoothly and allows the students to "learn by doing." Encouraging the Students and having a positive attitude was also important, and this was done. During the first workshop sessions, it took a little time for the Project Leader to fully relax when giving the lessons. His unfamiliarity with working with teenagers and his eagerness to do well and not forget any information meant that at first his manner may have come over as not as relaxed at it later became. However because the sessions were always so busy and the 45 minute lessons passed by very quickly, he felt that he adjusted to the situation and became more at-ease with the situation relatively quickly. Although available time was always something that the Teachers and Project Leader always had to be aware of, lessons were structured well enough to accomplish the goals set and allowed for experimentation and discovery on the part of the Students, within the context of the tasks.

It is felt by the author that the project made a positive impact on the Students and Teachers who were involved. There is definitely a desire among Teachers to do activities that are made up of the kind complementary components as those which comprise *The Service*. One of the respondents to the Teacher Questionnaire echoed this with her sentiments about the fun inherent in Multidisciplinary Learning, and that different classroom topics have a lot of potential to be interwoven. Furthermore, she believes that it only takes good organisation and the intention of teachers to achieve it in order to make scenarios like this happen. She would like to do more projects of this nature.

7.1.2 What the Challenges Were, How They Were Met

One of the interesting situations and challenges within the Workshop lessons themselves was that some Students were sometimes shy to speak English. This was not so much the case when the Project Leader spoke to individuals or in their groups of two or three, but particularly in front of the whole class. At the end of every Workshop a review and appraisal lesson was held, where each animation was watched by the whole class. The Project Leader attempted to get a little bit of discussion going by asking the makers of each animation something about their work or making a comment. In most cases, Students would just give the most minimal answer possible so as not to have to say so much in front of their classmates. This was not so much of a big problem, as in the workshop lessons the atmosphere was fairly relaxed, so that students felt more comfortable using englosh among their groups while performing the tasks, but it would have been good to get more of a group discussion going.

Another challenge that occurred in most Workshop lessons was that because animation is naturally a very time-consuming process and in order to try and get the most animation out of the class, there was only a certain amount of time left near the end of the Workshops in which the Students could save and export their finished animations. Different groups worked at different speeds and the animations varied in length, so time-management was almost always something of an issue. This was not helped by the fact that that procedure for saving and exporting each animation was composed of several steps, and the procedure tended to differ based on different

classes' setup; with the school cloud storage, for example. This was strategised around in two ways. In one instance, the Project Leader took all the iPads and used his own time after the lesson to go through each iPad in turn and save and export the work. On another occasion, particularly technology-savvy student was "enlisted" to help their classmates with this process.

Another way that this challenge could have been dealt with would have been to try and devote more time to figuring out how different classes dealt with their iPad data and learning all of the procedures. The practical reality of a busy school day is that there is usually not much time available to do this before or after a lesson. It was observed that where the Teachers are concerned, they seemed to spend their working days rushing to and from lessons with little time to do anything outside of lesson times. A possible solution would be to cover those procedures in the lesson planning meeting that always precedes a set of Workshop lessons.

What Could Have Been Done Differently

This question has been dealt with partly in the previous section when looking at the technical difficulties that occurred. Another point worth noting is that Workshop 3 was only three lessons in length. In retrospect this is not a long time in which to present the project and the tasks, instruct and guide the Students and allow time for them to animate, make a soundtrack and export their work. As a result Teacher C felt that she would have liked to see more language learning content. A suggestion on how this could be achieved is made in the next chapter.

7.2 Future Implications and Possibilities

Among the possibilities that exist for the Animation Workshop Service is the addition of more English language learning content. This could include word games that use the vocabulary learned surrounding the animation task, for example "frames", "focus", "aperture" et cetera, or more emphasis being placed on the soundtracks containing more spoken dialogue than is currently the case (this applies to students of grades who already have adequate use of the target language).

The author is aware that the development of *The Service* as a business was not developed beyond the basic freelance employment of the Service Provider. A business model canvas would help to shape this development, as would the consideration of marketing and promoting *The Service.*

Another avenue that could be explored business-wise that goes beyond *The Service* being conducted solely by the author, is to develop it as a source of training to teachers who are interested in conducting animation workshops of their own with their students. In that scenario The Service Provider would hold training sessions; not dissimilar in purpose to that training provided by bodies such as TOP-keskus; one of the organisations covered in Chapter 6.1.1, Benchmarking.

Further research on the subject of learning through play would be another future possibility, for the development of more content for younger learners is also something of interest. It is never too soon to introduce young students to foreign language learning. It should also be remembered that *The Service* could be just as effective if the target language were to be one other than English. There are many possibilities for the future of this service, and it is an exciting prospect that ways of learning such as this exist; enabling students to learn through participation, in order to keep language in motion.

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Appendix 2 - Co-design workshop journey maps

Appendix 3 - First and third grade animation workshop journey-map

Appendix 4 - Eighth and ninth grade animation workshop journey-map part 1

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Appendix 6 - Service blueprint

Appendix 7 - Student questionnaires & all results

Appendix 8 - Teacher questionnaire & all results