"I can't come up with any reason why English could not be integrated with any other subject":

English teachers' perceptions of integrating English with other subjects in upper grades of comprehensive school

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Tiivistelmä – Abstract

Nykykoulussa on edessä muutoksia, kun perusopetuksen uusi opetussuunnitelma otetaan käyttöön vuoden 2016 syksystä eteenpäin. Uusi opetussuunnitelma painottaa eheyttämistä ja monialaisia oppimiskokonaisuuksia enemmän edelliseen opetussuunnitelmaan verrattuna. Käytännössä kaikkien koulujen velvoitteena on siis tarjota oppilaille integroivia ja monialaisia oppimiskokonaisuuksia opetuksessaan (Norrena 2015: 25, Perusopetuksen opetussuunnitelman perusteet 2014). Näin ollen opettajat alkavat suunnitella ja muodostaa uudenlaisia yhteyksiä aineiden välille, joten on mielenkiintoista nähdä, minkälaisia kokonaisuuksia ja minkä aineiden kesken yhteistyötä tulee tapahtumaan.

Tämän tutkielman tarkoituksena oli selvittää, mihin oppiaineisiin yläkoulun englanninopettajat mieluiten integroisivat englantia ja mitä oppiaineita opettajat kokevat mahdollisena integroida englantiin. Lisäksi tavoitteena oli tutkia, mitkä aineet puolestaan eivät ole opettajien suosikkeja. Tutkimusaineisto kerättiin sähköisesti Webropolin avulla suunnitellulla ja toteutetulla kyselylomakkeella ja siihen vastasi 49 englanninopettajaa ympäri Suomen. Tutkimuksen suljetut kysymykset antoivat taustatietoa opettajien mieltymyksistä integroida tiettyjä aineita englantiin. Tämän lisäksi kyselyssä oli avokysymyksiä, joissa opettajat saivat perustella suljettujen kysymyksien ainevalintoja ja kertoa tarkemmin näkemyksiään integraatioon liittyen. Nämä vastaukset analysoitiin laadullisesti sisällönanalyysiä käyttäen.

Kyselyn tuloksien mukaan englanninopettajat integroisivat englantia mieluiten historiaan, maantietoon, kotitalouteen ja musiikkiin muun muassa aineiden yhteisten teemojen takia. Sen sijaan fysiikka, ranskan kieli ja kemia nähtiin oppiaineina, joita englanninopettajat eivät integroisi mielellään englantiin. Syyksi annettiin esimerkiksi oppiaineiden vaativa sanasto ja opettajien puutteellinen osaaminen tietyissä aineissa. Tulokset antavat kuitenkin aihetta jatkotutkimukselle, sillä tutkimus jätti vielä avoimeksi sen, miten paljon opettajien omat ajatukset ja mielipiteet integraatiosta vaikuttavat integraation toteutumiseen. Lisäksi uuden opetussuunnitelman astuttua voimaan olisi myös mielenkiintoista tutkia, mitä aineita käytännössä integroidaan toistensa kanssa.

Asiasanat - Keywords

integrative teaching, national curriculum, upper grades of comprehensive school

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1 INTRODUCTION

The general opinions on education in Finnish schools have been rather critical for the past years as schools have been blamed for being too theoretical and distant from real life situations (Atjonen 1992: 1). In addition, the current way of organizing education into strictly separate subjects has been argued of not enabling students to see the connections between various issues and themes which occur across subjects (Norrena 2015: 144-145). The aforementioned claims have lead people involved with education to think of solutions to the fragmented situation. One possible answer has been integration, as it is claimed to be a functional way of organizing education (Atjonen 1992: 1). Therefore, integrating different subjects and themes together in schools has become a current and frequently discussed topic. However, integration has a long history (Reed 2009: 5). It has been debated as long as schools have existed, but especially now it has become topical as the National Curriculum of 2014 gives increasing attention to both integration and cross-curricular themes. From August 2016 onwards schools are facing a new and more integration-oriented curriculum to be followed and executed in practice.

The demands for students who are graduating from comprehensive school have become more diverse. Boss (2011) claims that our present and future global and dynamic economy requires flexibility from its members, which means that those who can work and balance naturally between different disciplines are the ones who will thrive. Therefore, integration is considered as a possible and effective approach to insert in schools since it values skills, which are needed in the current world. These are, according to Reed (2009: 5), creativity, collaboration, adaptability and critical reasoning. Thus, integration covers multiple issues and general skills. It is also a method which can be adapted and realized in several ways with lesser or greater emphasis devoting a varying amount of time to it. Although is seen as a viable option to organize education in schools, it has created some opposing arguments as well. However, as the National Curriculum of 2014 guides teachers to use integration in their teaching, it will be interesting to see how integration is carried out in practice. In

addition, which subjects will be integrated with each other in reality and if there are connections which will come more naturally compared to others will be discovered from fall 2016 onwards.

Not that many studies on integration have been conducted in the Finnish school setting. Mainly purely qualitative research has been conducted so far as the previous studies have concentrated more on interviewing teachers and reporting on their individual opinions on integration. This is also the case with international studies as well. For example, in the Finnish context, Weckström (2015) and Mylläri's (2015) studies discussed the advantages teacher see in using integration and the hindrances there are in realizing integration in practice. Similar themes were covered in the study of Lam et al. (2013), who concentrated on teachers' opinions on an integrated curriculum in secondary schools in Singapore. A more subject-related finding came up in Annanpalo's (2004) study discovering that teachers have some preferences for distinct subjects, as first, mathematics, physics, chemistry and biology, second, mother tongue and other languages and, third, history and religion were stated to be subject clusters which could be integrated together. However, the results themselves did not reveal more exact reasons behind the integration of distinct subjects.

The aim of this study was to receive a better general view of the opinions teachers have on integration and how they feel about integrating different subjects with English. The research questions of this study concentrate on the subjects which English teachers would prefer to integrate with English and which subjects English teachers would not prefer to integrate with English. The research questions also try to investigate why teachers have preferences for certain subjects. In total 49 English teachers around Finland participated in the study. The data was collected with an online questionnaire and it consisted of closed questions, which gave background information of the preferences teachers have for certain subjects whereas the open-ended questions elaborated the choices teachers had made in the closed questions as well as their opinions on integration.

Firstly, the second chapter of the thesis will present the concept of integration as it holds many interpretations. The different forms of integration, including vertical and horizontal integration in addition to integration on specific skills, sequenced integration, theme-based integration, full integration and single occasions of integration, will be clarified. Lastly, the advantages and disadvantages of integration are also considered. In addition, the history and current state of integration in Finland will be discussed in the third chapter. This includes presenting CLIL and Steiner schools as well and their basic teaching principles are brought forward. The chapter also includes introducing the National Curriculum of 2004 and 2014 and their stand on integration will be looked into more detail to form an overall picture of the demands it has for teachers and schools. The fourth chapter will cover the previous studies on integration and after this, the data and methods and analysis for this study will be presented. The results of the current study will be revealed and discussed further in chapter six. Lastly, the limitations and the possibilities for further study will be discussed.

2 INTEGRATION AND INTEGRATIVE TEACHING

Integration is a multidimensional concept with many meanings and interpretations. However, at its simplest, it means making connections (Drake and Crawford Burns 2004: 7). Due to integration's complexity, researchers and literature use diverse terms and meanings for the idea depending on the context and use of the term. In addition, Fogarty and Pete (2009: 2) point out the subjective aspect of integration as every teacher and learner have their own way of perceiving the concept. Nevertheless, some definitions can be made in order to understand the idea more thoroughly. This chapter, therefore, first presents the many interpretations integration has. In addition, as the concept is versatile, it can be carried out in schools in multiple ways and for a varying amount of time. These distinct ways of integration can be seen, apart from standard schools, in Steiner and CLIL pedagogy schools, which integrate subjects or language and subjects together. Lastly, the advantages and disadvantages of

integration will be introduced, as the concept is not in practice as straightforward as it seems.

2.1 The definition of integration

Integration can be divided into two fundamentally different approaches: vertical and horizontal (Atjonen 1990: 30, Hellström 2008: 56, Husso 1989: 58, Kari 1994: 95). Hellström (2008: 56) describes vertical integration to be the sequential organization of similar subject themes and units according to a logical principal within a subject. Husso (1989: 58) adds to this by stating that vertical integration includes the idea that concepts in a specific subject develop and become more difficult. An example of this is how in English language classes first simple, general and rather pragmatic vocabulary is learned, while more abstract and complex words are learned afterwards as students advance in the subject. In fact, vertical integration has been the prevailing way to realize integration in Finnish schools and in other countries as well. This might be due to many school systems being based on both the division of different subjects and the introduction of more difficult subject matter as students proceed in their studies (Wraga 2009: 92).

By contrast, horizontal integration, which this study also concentrates on, means that different phenomena and themes are learned as a whole by linking or overlapping distinct school subjects or themes simultaneously (Hellström 2008: 55). More precisely, according to Drake and Crawford Burns (2004: 8), the concept implies that there is a unification of subjects and experiences, since similar type of skills and ways of constructing information, which are present in various subjects, are connected. In addition, horizontal integration can mean that the different aims and contents in each school subject are adopted by means of a certain theme or problem (Husso 1989: 58). Thus, integration can happen with larger units such as subjects or with smaller units such as certain skills. In practice this means, for instance, that students would learn about globalization from the social studies and geography's point-of-view simultaneously or that English would be taught together with another school subject

or, lastly, each school subject would somehow address information technology skills in their lessons during one period.

Since integration combines subject matter from different disciplines, Vega (2013) explains how a typical way of conducting integration is to have teachers working with other teachers in teams across distinct subjects. Thus, for example, when teaching an integrative entity of the history of the United States, both the history and English teacher would be present in the classroom. This might also be the reality in many schools in Finland as schools have separate teachers for different subjects, which means that the contribution of at least two teachers is most likely required (Koppinen and Pasanen 1981: 27). Another integral part of horizontal integration is the idea that themes and subjects in school are applied to real life or lifelike projects. These projects are relevant and meaningful and teaching is modified to match students' life situations (Hellström 2008: 56, Fogarty and Pete 2009: 9). Hence, integration can be considered to be rather student-centered and a motivating way to organize education as it takes into account students' interests. In this particular study, only the horizontal aspect of integration is dealt with as vertical integration does not include the objective of combining different subjects, subject matter or themes together as it only concerned with contents, which come more difficult by time.

2.2 Different levels of integration

As stated in the previous chapter, there are not only fundamental differences in integration, but there is also a number of ways to add horizontal integration to education. Therefore, integration is a flexible concept, since it can be realized in different degrees during a variable period of time and it can consist of different combined methods (National Curriculum 2014: 29). This integration's versatile nature is illustrated by Freeman and Mathinson (1997: 9-10) who explain that integration can be thought of as a continuum in which the intensity of integration can differ. As a case in point, integration can be described to be in its bare minimum when only subtle attention and little effort is given to similar or related issues in other subjects. In

practice this would mean mentioning shortly during English classes that many other languages in addition to English use articles. On the other hand, integration can be more extensive if teachers address problems and themes in some other school subject, or even fuse subjects from different disciplines during a longer period of time (Drake and Crawford Burns 2004: 8). Hence, there is not only a single way to carry out integration in schools, which means that there are various options for teachers to add integration into their teaching.

Next, the different ways to group various aspects of integrative teaching are elaborated. Different theories have their own way of understanding and classifying integration into distinct categories, but, nevertheless, the integrative elements within these differing categories are almost identical in each model. In this present study only those theories and parts of theories are taken on board which clearly indicate linking two subjects or common concepts in different school subjects together. In addition, these different levels of integration have been grouped into particular categories according to how much importance distinct disciplines or themes are given in the integration process. In other words, the division is based on how deeply two different subjects overlap or are linked in education. In addition, how long an integrative unit lasts is also taken into consideration.

2.2.1 The integration of specific skills

Firstly, integration can be realized by targeting at some specific skills or fusing different skills, shared concepts and knowledge and attitudes into the school's curriculum and teaching (Fogarty and Pete 2009: 39; 2009: 90, Mathinson and Freeman 1997: 11, National Curriculum 2014: 30). These are usually generalized life skills and abilities to use certain techniques, such as communication or writing skills or working together and practicing team work skills, which all enhance learning at the same time (Drake and Crawford Burns 2004: 12-13, Fogarty and Pete 2009: 39). One or multiple specific skills, which are natural to cluster and combine together, can be addressed in teaching simultaneously and focus for these skills can be given during every class for

a certain period of time or which can vary as well (Fogarty and Pete 2009: 4, 90). For example, technology skills can be chosen a target skill to be mastered. Thus, the use of technology and skills related to it are present in every school subject for a certain period of time of the school year (Drake and Crawford Burns 2004: 9). For instance, in practice, students would first use tablets to take pictures in art classes, then find information online on World War II and, finally, film a news video in English classes. In this case, technology skills extend to different subjects across various disciplines and are used for diverse purposes.

2.2.2 Sequencing as a means of integration

Sequencing is another way to organize education in an integrative manner. It can be accomplished in schools by, for instance, studying a similar theme in two or more subjects in parallel or organizing concepts and ideas in these themes so that they are studied sequentially (Fogarty and Pete 2009: 48, National Curriculum 2014: 30). In addition, these similar themes are addressed from distinct perspectives the different subjects obtain (Drake and Crawford Burns 2004: 10-11). As a case in point, in social studies, history, biology and English a topic which is covered is globalization. Instead of discussing the phenomenon in all four subjects in different times of the school year, teachers can decide to teach these topics sequentially, so that each subject addresses the concept either at the same time or one subject after the other. Thus, when education is sequenced, the topics and subjects themselves usually stay separate as they are only programmed to be discussed approximately in tandem. However, in sequenced integration it is also common to connect two or more subjects which are from related disciplines (Fogarty and Pete 2009: 48). In practice this would mean integrating, for example, biology and geography or physics and mathematics together.

2.2.3 Theme-based integration

In addition to the already mentioned ways, integration can be approached from a thematic perspective. According to Fogarty and Pete (2009: 65), this implies that theme-based units are planned so that they cover the different subjects chosen to be linked together. This view is also shared by Mathinson and Freeman (1997: 11). What is different from sequencing is that the themes are often more general and they are used as the basis when planning an integrative entity. In addition, the objective is not to keep different subjects apart and plan to teach similar topics in them sequentially, but to find larger entities and brake the routines of having distinct school subjects. For example, theme-based integration can be accomplished by using a general but productive theme such as patterns, which occurs in many school subjects (Fogarty and Pete 2009: 66). Thus, patterns would be observed from the point-of-view of mathematics, biology and physical education forming a general view on the theme. In addition to the fact that theme-based integration usually consists of multiple subject areas, the planned unit can last for weeks depending on the breadth of it and it can possibly involve the whole school in it (Drake and Crawford Burns 2004: 11, Fogarty and Pete 2009: 65).

2.2.4 Full integration

Integration can also be less confined to subject boundaries when it is realized across different disciplines by planning and basing it on combining subjects from different fields (Fogarty and Pete 2009: 92, National Curriculum 2014: 30). Thus, integration can in its fullest mean removing the division of different school subjects completely and basing the studying on larger themes and entities, which can go beyond the normal themes present in schools (National Curriculum 2014: 30). A good example of this would be when a school does not have separated subjects, but the starting point for planning education is a large, cross-discipline theme or phenomenon which will collect themes, views and didactics from various school subjects, such as

entrepreneurship. Apart from connecting two or more subjects fully together, integration can be realized by combining subdisciplines from different subjects. For example, math, physics and biology could be connected together in order to form an entity of science (Drake and Crawford Burns 2004: 8). A point to be mention therefore is that not all school subjects are involved in full integration simultaneously. In fact, a smaller, and perhaps an easier unit to grasp can be formed from the subjects the key factor nevertheless being the unification of subjects.

2.2.5 Single occasions of integration

Lastly, integration can be carried out during short periods of time by only producing a single unit of integrative teaching. In practice this would mean that integration would be realized within one day or afternoon by arranging different theme days, such as music in English-speaking countries or organizing events in schools, such as workshops on health and well-being in a teenager's life. These theme days or other events can involve the whole school and, thus, not only be targeted to a certain age group. In addition, even field days, which happen outside the basic school environment can be seen as a part of integrative teaching (National Curriculum 2014: 30). These field days can consist of, for example, making a tour to a local wind farm or museum, which links school and real life together. There are also some not so common ways to practice integrated education in Finland, which can still be carried out in the Finnish school context. These include service learning and community projects, which can be realized, for example, by having students do voluntary work in a local sheltered home (Drake and Crawford Burns 2004: 10).

2.3 Integrating English and contents together

As seen from the previous sections, integration can occur between any subjects. Now, however, integration between a language and another subject will be examined. Using a foreign language such as English in teaching the content, according to Pitkänen (1992: 6, 8), increases the effectiveness of teaching as both the language and the

contents of another subject are studied. Thus, when a language is the other partner in the integration process, language learning happens through learning contents of another subject. In fact, being able to integrate a language and a content subject together meaningfully and functionally contributes to both content and language learning (Pitkänen 1992: 14). Moreover, Koppinen and Pasanen (1991: 38) state that making connections between languages and content subjects enable to diversify and deepen the knowledge on a specific linguistic area or themes in content subjects with the help of authentic and foreign language material. Using languages beside content subjects also contributes to language awareness, as different subjects have their own specified vocabulary and way of using terms (National Curriculum 2014: 28).

In addition, integrating language and contents makes students see that language can be used in different situations for distinct purposes and that it is not only studied for the sake of the language itself. Therefore, language is not only a communicating means, but a device to learn different issues and aims set in the National Curriculum (Pitkänen 1992: 8). Pitkänen (1992: 9) claims that in the upper grades of comprehensive school teaching content subjects is more demanding, since the vocabulary is more extensive and the subject matter is more complex. As an example, Pitkänen (1992: 15) argues that compared to history, integrating English with biology is more problematic, since there is more specific knowledge and concepts, which the teacher might be unable to elaborate on. This might easily lead teachers to simplify the contents at the same time as they facilitate the language for students. However, the high processes of thinking should nevertheless stay as a central objective of teaching.

The preference over languages in integration processes can be reflected in how many schools have chosen another language than Finnish as the medium of teaching In Finland, foreign language teaching has been provided for over 20 years, when the new law on education came into effect allowing new adjustments for schools (Miettinen, Kangasvieri and Saarinen 2013: 71, Nikula and Järvinen 2013: 147). So far integration has mainly been realized by organizing the teaching in English as it is seen as a

language which is a basic skill needed in the globalized world (Nikula and Järvinen 2013: 145).

2.4 Integration: why, or why not

Integration is a concept, which is topical and, as already stated, many people working in the school world see it as a functional way of organizing education. Indeed, integration does not only affect how subjects and the teaching are arranged in schools as its influence and positive outcomes go beyond the subject level. Students become more motivated when education is integrated and study results have almost always improved. However, integration is not as simple a solution as it appears. Many opposing arguments have been given as well, but they mainly concentrate on the practical realization integration requires as well as the boundaries the present school system sets for it. In addition, the hardships arising from collaboration and teamwork among teachers are claimed to be central objections against integration. Therefore, the advantages and disadvantages of integration will be discussed as they also present the opinions many teachers might have when integration in general is regarded.

2.4.1 Advantages of integration

Integration is claimed to have numerous positive educational outcomes. One of the biggest advantages of it is the student-centered emphasis (Atjonen 1992: 70, Hellström 2008: 56). Mathinson and Freeman (1997: 7) elaborate this further by stating that the way students are perceived in integration takes into account the student as a whole, including and considering physical, emotional, social, and cognitive needs. Students are also central in integrative teaching as issues from their own world are often chosen to be the starting point when education is being designed (Norrena 2015: 22). Atjonen (1992: 70), thus, states that integration is strongly tied to student interest, which, according to Koppinen and Pasanen (1981: 8), increases motivation as well. Another issue which takes students into account in integration is the way communication and

power becomes more learner-centered. Atjonen (1992: 78) claims that compared to subject-centered teaching, which can many times be teacher-lead, integration tries to step away from the traditional view of teachers being the sole authorities in the classrooms. In addition, it makes room for new ways of communicating between teachers and students welcoming diverse student voices into discussion. All the abovementioned factors also affect the way students become more responsible for their own learning and do not rely that much on teachers guiding their learning.

In addition, as Hellström (2008: 55) claims, integration's success might be due to the fact that organizing different themes into pedagogically reasonable and interesting units helps students understand large phenomena more thoroughly. This might be a result of integration gathering subjects and subject matter together which are usually disconnected by creating a more meaningful understanding out of scattered information (Atjonen 1992: 44, Boss 2011). Thus, in practice students have a deeper understanding of core content and they are able to have a wider perception of the connections across subjects (Boss 2011, Vega 2013). Indeed, Mathinson and Freeman (1997: 19) discuss how one of the advantages of integration is that understanding, retention, and application of general concepts increases. In addition, students perform better in their ability to identify, assess and transfer significant information needed for solving novel problems (Mathinson and Freeman 1997: 20). Koppinen and Pasanen (1981: 8) sum this up by arguing how meaningful integration enhances learning. Lastly, according to Atjonen (1992: 66) and Koppinen and Pasanen (1981: 8), integration can erase the unnecessary repetition of similar themes in different grades when information is linked together. It also might, to a certain extent, lessen the workload teachers have.

Some other benefits of integration are how students develop a better attitude towards themselves as learners and how their motivation increases (Mathinson and Freeman 1997: 20). Wraga (2009: 94) adds to this by claiming that "encouraging students to make connections between subjects and between subject matter and life beyond school can make subject matter more meaningful and increase student learning". Hence, the

aspect of integration connecting real-life situations with school enhances student motivation and also prepares students for tackling challenges in the world outside school (Boss 2011). Perhaps all these factors result in learning outcomes in integrated learning settings being on the same level or even better than in those which are subjectcentered (Wraga 2009: 94) As for teachers, Mathinson and Freeman (1997: 20) claim integration to give more curricular flexibility and less schedule and subject fragmentation as different school subjects can be organized in a more meaningful way. In addition, time efficiency increases as teachers do not have to teach the same themes separately in distinct subjects, which also relates to reducing the workload. Lastly, Mathinson ad Freeman (ibid.) stress how integration is also beneficial to relationships as it enables better collegiality and support between teachers. In addition, according to Pitkänen (1992: 13), this is due to collaboration being an important factor in successful integration which directs teachers to co-operate. Norrena (2015: 112) welcomes this by stating that teachers generally work alone and are not that used to working in teams, which highlights the benefit of integration for teachers in developing cooperation.

2.4.2 Disadvantages of integration

Although integration has many advantages on its side, some issues are worth considering in it. First and foremost, one of the challenges of integration is to find enough time for teachers from different disciplines to collaborate (Atjonen 1992: 66, Vega 2013). Indeed, Fogarty and Pete (2009: 94) claim that taking into account each discipline and their central concepts in integration requires a great amount of work and resources. Atjonen (1992: 66) adds to this by arguing that in many schools there is not enough time or will to plan integrative units. Integration often involves scheduled planning and teaching time together as well as restructuration of the curriculum and schedules. In addition, according to Koppinen and Pasanen (1981: 11), teachers are not paid extra for planning integrative units. This and the sometimes great amount of planning time can likely lead teachers to avoid collaboration (Fogarty and Pete 2009: 94). In addition, in Finland teachers are mainly educated and used to working alone,

which means that collaboration with other teachers might not come that naturally (Atjonen 1992: 66). Therefore, Boss (2011) claims that those schools which emphasize teacher collaboration and working in teams have a rather solid basis for integrating subjects together.

One practical matter which integration is criticized for is how well balanced the actual teaching is when subjects are taken into consideration (Atjonen 1992: 49). To be more precise, in Finland each subject has to be taught for a certain number of hours each year and schools need to follow these instructions. Therefore, Atjonen (1992: 36) argues that teachers have to be more careful when planning integrated entities, in order to have equal emphasis on each subject. Atjonen (ibid.) adds that this might become difficult since integrative classes are not thought of as 45 minutes of teaching one subject and distinct subjects for each lesson are not clarified in the timetable (Atjonen 1992: 36). However, Atjonen (ibid.) recognizes that the balance between subjects can be accomplished by setting clear aims and having a rough outline of the hours used for each subject. In addition, another disconcerting matter is how to maintain integration coherent for students throughout grades as teachers can change yearly (Atjonen 1992: 48). Thus, Atjonen (1992: 49) claims that it is the teachers' responsibility to ensure that students have a logical continuum in their teaching. Thus, the collaboration between teachers can be seen important in this sense as well if the objective is to produce logical and progressive integrative teaching for students.

In addition, Atjonen (1992: 83) claims that integration is not possible to realize in a reasonable way if teachers do not know what is required from different subjects in the National Curriculum. Atjonen (1992: 55) continues by arguing that integration demands knowledge of the different elements which are integrated with each other. Therefore, if teachers only master one subject and have narrow knowledge of other school subjects, integration can become superficial and not beneficial for students (Husso 1989: 61). At present, teachers are educated for different subjects and after university most of them master one to three subjects. As teachers only have a limited proficiency, although a very deep one, in only a couple of subjects, planning integrated

entities can many times require help from other teachers who master other subjects more profoundly. However, a question to be raised is how much the abovementioned idea is to do with knowing the content of a subject and how much a strong overall pedagogy helps teachers in the integration process. As Norrena states, teaching consists of the joint effect of two factors, which are the teacher's personality and professionalism (2015: 123). Indeed, Atjonen (1990: 29) claims that in the end, teachers are responsible for their own didactic thinking and how they will realize their teaching and in this case, how they will integrate English with other subjects.

3 INTEGRATION: THE PAST AND PRESENT

This chapter consists of discussing the way education has mainly been organized by dividing education into different disciplines, but how, nevertheless, integration has also been a part of education for a rather long period of time (Reed 2009: 5). In addition, the first phases of integration becoming a part of teaching in schools in Finland is also introduced. The history of integration in Finland dates back to the end of the 19th century and has been more or less present in schools ever since as borders between disciplines and different school subjects have been in a constant change (Mikkeli and Pakkasvirta 2007: 23). Two different schools, namely Steiner pedagogy and Content and Language Integrated schools (CLIL), which are present in the Finnish school world will be presented as well as these schools follow integrative teaching to a certain extent. Lastly, the current situation of integration in Finland is discussed. This includes observing how integration is treated in both the national Curriculum of 2004 and 2014 and how the new National Curriculum will guide teachers and schools in adding integration into teaching and into the everyday practice.

3.1. First notions of integration

From a general point-of-view, there has always been a need to systemize information. Therefore, the division of different subjects is based on our tradition of categorizing things in order to understand them better (Norrena 2015: 145). Indeed, already in Ancient history and practically throughout the Western world's history different disciplines have been a basic unit in the academic life (Mikkeli and Pakkasvirta 2007: 12). Koro (1994: 118) claims that the division to different subjects has long and rather static traditions, which is still visible in schools around the world. Although organizing themes and disciplines into meaningful units has been a prevailing system for hundreds of years, it is only one way of structuring information and school subjects (Atjonen 1992: 58). Indeed, Raatikainen (1990: 15) states integration to have been a discussed concept for a long time as well, since the idea of combining similar themes and subject together can be claimed to be as old as the history of education. Therefore, Reed (2009: 6) quite justifiably claims that integration is not only a passing trend in the history of education, but has its grounds in the past as well.

To be more precise, Atjonen (1990: 28) states that the starting point for integration can be tracked down behind hundreds of years to the end of the 19th century and to progressive pedagogy and its principles. The best-known ideas have come from Rousseau's views of supporting children's natural growing and Dewey's learning-by-doing approach. In fact, Dewey stated already in the 1890s that schools have to abandon teaching different disciplines, because it is unnatural for children (Koro 1994: 118). Thus, integration's child-centered outlook has been noted fairly long ago. All in all, different trends, theories and researchers have influenced the way education has been organized as the emphasis has been placed from separate disciplines to integration across subjects (Kari 1994: 15). Currently, more attention has started to been given to integration and blurring the lines between subjects instead of stressing the individuality of distinct subjects.

3.2 The history of integration in Finland

Integration has rather long roots in the history of education and this is the case of it in the educational history in Finland as well. In fact, the first traces and mentions of the idea of integration can be tracked down to the year 1866, when the law concerning teaching in schools was established integration being a concept mentioned in it (Raatikainen 1990: 15). Hellström (2008: 55-56) explains how during these early years at the end of the 19th century and at the beginning of the 20th century, a form of integration was realized in so called work schools in which school days consisted of students doing handcrafts, playing and learning how to be independent. However, actual suggestions to support integration were discussed years later in the beginning of the 20th century as child-centered teaching became a hot topic in the world of education (Hellström 2008: 55). The influence of the educational trend were present in Finnish schools as some integrative teaching experiments were realized mainly in comprehensive schools during this time period as well (Husso 1989: 59, Raatikainen 1990: 20).

One of the pioneers of integration and integrated curriculum in Finland was Aukusti Salo, who during the 1920s introduced the idea of studying one selected theme in two or more school subjects simultaneously. This also corresponds with the basic idea of current theme-based integration. Later in the 1930s Salo wrote instructions on how to organize teaching with the integrated curriculum, which can state to have established the tradition of integration in Finland (Raatikainen 1990: 24, Atjonen 1990: 28, Husso 1989: 58). After the first enthusiastic years, integration, however, did not receive as much attention during the 1950s and 60s as the comprehensive school together with the new National Curriculum and new ideas and trends in education were introduced (Atjonen 1990: 40). According to Pitkänen (1992: 13), integration nevertheless stayed to a certain extent visible in school books, since, for example, the British culture and generally the knowledge of Anglo-American culture was valued in English books. This can be seen in how the emphasis was on the history of Great Britain, and the geography, literature and arts of English-speaking countries. However, integration became popular again in the 1970s. Greater measures to imply integration were taken, though, approximately ten years later, when children once again became the focal point of education and teachers became interested in the idea of integration (Atjonen 1990: 40, Hellström 2008: 56). This was also due to the fact that the legislation on schools was renewed in 1983. In practice it also meant changes to the National Curriculum of 1985, which introduced integration yet again guiding and obliging people involved in education to notice it as a way of teaching in schools (Koppinen and Pasanen 1991: 3). After this, the enthusiasm around integration decreased little by little, but is currently becoming a more prominent part of education.

3.2.1 Steiner pedagogy

The first Steiner schools in Finland, which base their pedagogy on Rudolf Steiner's research, were founded in Finland in 1955 (Paalasmaa 2011: 7). However, according to Paalasmaa (2011: 24), it took around thirty years for the pedagogy to take root as the majority of Steiner schools were founded in the 1980s in the larger cities. The general principles and tasks behind Steiner pedagogy are fostering healthy development in each individual child, enabling children to reach their potential and helping them to develop skills they need to contribute to society (Rawson et al. 2000: 7). In addition, a central idea in Steiner pedagogy is to insert artistic elements and imagination to teaching, which can also be seen as a form of integration (Dahlström 1883: 8).

One of the emphases Steiner pedagogy has is on horizontal education and integration. Therefore, integration can firstly be seen in how different subjects are integrated together according to each age group's needs (Rawson et al. 2000: 36). Secondly, according to Dahlström (1983: 12), another of the key features behind Steiner pedagogy related to integration is that a subject is chosen as the main subject for a period of two to six weeks. The subject is then integrated with other subjects and cross-curricular comparisons are also made simultaneously (Rawson et al. 2011: 19). Thus, during these periods, students immerse to a certain topic as teachers try to gather a coherent whole by making meaningful connections across subject areas and addressing varied range of different skills (Rawson et al. 2011: 20). Dahlström (1983: 12) therefore claims that as the idea of having a comprehensible entity is more stressed in Steiner pedagogy, learning the contents becomes more meaningful and interesting for students compared to having fragmented pieces of information. This is possible as one teacher teaches all

of the subjects to their students, which manages teachers to avoid different themes splitting up into distinct subjects when in reality they are only distinct perspectives of the same reality (Dahlström 1983: 11).

3.2.2 CLIL

Next, Content and Language Integrated Learning (CLIL) will be presented. It is, according to Coyle (2010: 1), "a dual-focused educational approach in which an additional language is used for the learning and teaching of both content and language". In other words, the focus of CLIL pedagogy is both on the content and the language used in teaching the content, although the emphasis from content to language can vary from time to time (Coyle 2010: 1). In addition, Nikula and Järvinen (2013: 144) remind how the concept of CLIL is straightforward as it is rather widely applied as a synonym or an umbrella term in Europe for using a foreign language as the medium of teaching. However, CLIL is not a new form of language education although it is an innovative fusion of both language and content teaching (Coyle 2010: 1). In CLIL, the language used in teaching, the so called additional language is often a foreign language to learners, but it can be a second language or a heritage or community language as well (Coyle 2010: 1). Depending on the institution providing CLIL programs, content can vary from subjects taken from the national curriculums to a more project based entity which combines aspects of the curriculum by, for example, learning about the Olympic Games (Coyle 2010: 28).

In Finland, CLIL schools have existed for over 20 years as the law on education changed and schools were able to offer their teaching in a foreign language (Nikula and Järvinen 2013: 147). In addition to having CLIL schools which use English as their teaching language, many of the CLIL schools have Swedish as their additional language. However, they are not purely thought of as language immersion schools, since Swedish is an official language in Finland (Miettinen, Kangasvieri and Saarinen 2013: 73). Therefore, schools which use Swedish as the language of education are not seen as a part of CLIL teaching. It is, nevertheless, important to notice that using

another language than Finnish as the teaching language is not solely limited to English, even though it is the most popular one among foreign languages.

3.3 Integration nowadays

As seen from the previous sections, the opinions on how the curriculum and education should be organized have been in a continuous wave motion during the past decades heaving from subject-centered teaching to more integrative teaching (Kari 1994: 15). However, nowadays, according to Drake and Crawford Burns (2004: 3), the situation seems optimal for integration and teachers are in a mindset of making connections between different school subjects. In addition to the general favorable attitude, Mathinson and Freeman (1997: 7) claim that the current and constantly changing demands of 21st century working life directs schools towards integration. Moreover, the pressure for integration contains many of the trends of recent discussions of education which include shared goals, flexible scheduling, site-based decision-making, collegiality, and outcome-based assessment (Mathinson and Freeman 1997: 23).

In addition, Wraga (2009: 88) argues that there is a tendency among students to increasingly see schoolwork as less interesting and less useful for them in the future. This also highlights the importance to connect separate subjects and experiences with life beyond school in teaching. Fogarty and Pete (2009: 3) claim that in the current situation educational theorists, teachers, parents and students crave for a wind of change in education as well. An answer to this alteration in education could be integration. According to Fogarty and Pete (2009: 3), firstly, theorists see it as a natural part of education based on how learning is perceived to happen according to current theories. Secondly, teachers on their part feel frustrated with the present standard-based curriculum. Lastly, parents are concerned if school prepares students for the real world and students see learning fractured and not that relevant. All these concerns Fogerty and Pete (ibid.) mention have led to more attention given to new solutions in

teaching, which has given growing interest on integration as well. Next, the situation in Finland from the National Curriculum point-of-view will be discussed. Thus, the National Curriculum of 2004 and 2014 will be examined and compared and the status National Curriculums have on education and the realization of it will be presented.

3.4 The National Curriculum and integration

According to Atjonen (1992: 1), the National Curricula in Finland can rather fairly state to be the most important and central document for schools. The aims, syllabuses, teaching arrangements and basis for assessment it defines outline the field in which schools can operate. Thus, it is justifiable to say that National Curricula shape how schools and education provided in them are organized and which issues are taken into account in education. The previous curriculums have had different emphases on integration varying form strictly separate subjects to more integrative teaching.

In addition to different laws and regulations, a central tool for teachers are the National and local curricula (Norrena 2015: 142). A key factor affecting how education is arranged in Finland is the National Curriculum. The National Curriculum covers the different objectives, contents and policies of education, which are set by The Finnish National Board of Education and, thus, is the core for organizing education (Atjonen 1990: 29). It provides regulations and guidelines all schools and education providers are obliged to follow as well. In addition, local curricula are formulated based on the national core curricula and requirements in which education providers describe how the national aims will be reached at a more local level (The Finnish National Board of Education). Thus, integration's status in education is to an extent dependent on how the Finnish National Board of Education acknowledges integration in its guidelines as well as how it is taken into account in local curricula. A notion to be mentioned is that the planning of the Finnish National Curriculum has always been dominated by the distinct school subjects, which can be seen in different municipalities and in their way of living up to the guidelines of the national curriculum (Atjonen 1990: 31).

3.4.1 Integration in the National Curriculum of 2004

The idea of integration was already included in the National Curriculum of 2004 as cross-curricular themes were introduced in it (Norrena 2015: 19). The National Curriculum (2004: 36) states that teaching can either be divided into subjects or integrated as cross-curricular themes, which have shared contents with multiple subjects. The current National Curriculum lists seven distinct cross-curricular themes, which schools and teachers should add to their teaching. These themes are growth as a person, cultural identity and internationalism, media skills and communication, participatory citizenship and entrepreneurship, responsibility for the environment, well-being, and a sustainable future, safety and traffic and, lastly, technology and the individual (The National Curriculum 2004: 36-41). The core contents of these themes cover many different subjects enabling connections and integration between subjects. However, these themes are rather vague and do not need extensive energy to be fulfilled in the actual teaching.

Thus, the use of integration has been completely possible and even desirable in the National Curriculum of 2004, although it has not perhaps explicitly encouraged teachers to give extensive attention in integrating two distinct subjects together or use it as a means of teaching. As Halinen and Jääskeläinen (2015: 24) claim, the national alignments have been too broad and not supporting schools in carrying out integration. In addition, when integration is concerned, the National Curriculum does not give many mentions. In fact, in the objectives and contents of subject English there is not a sole mention of integration or a reference to the cross-curricular themes. Therefore, integration does not have a highlighted status in the National Curriculum of 2004. Now, after discussing the National Curriculum of 2004, the new National Curriculum, is examined more closely.

3.4.2 Integration and cross-curricular themes in the National Curriculum of 2014

The New National Curriculum introduces renewed cross-curricular themes, the purpose of which is to counterbalance the traditional view of having separate school subjects. These seven new cross-curricular themes are thinking and learning how to learn, cultural knowledge, communication and expressing oneself, taking care of oneself and everyday skills, multiliteracy, information technology skills, working life skills and entrepreneurship, participatory citizenship, influencing and building a sustainable future (National Curriculum 2014: 20-24). According to Norrena (2015: 25), the idea behind this is that some of the themes taught in school are units which transcend subject barriers. If these themes are studied separately, students will receive a scattered view from only one subject's perspective.

In fact, the new National Curriculum (2014: 29-30) provides information on how to implement integration into schools. As already stated, the present National Curriculum (2004) does not have a strong emphasis on integration, as only crosscurricular themes were presented in terms of integration and only some subjects, such as Finnish and home economics, received mentions of integration. The National Curriculum of 2016 pinpoints the positive sides of integration and how it is an important factor in unifying schools' conducts. Indeed, schools are now obliged to organize at least one integrative or cross-curricular unit during each school year (Norrena 2015: 25). In addition, it highlights that the objective of integration is to help students understand the relations and links between the different themes and subjects they are studying. This linking of information facilitates students to make connections between subject areas, structuring these connections into meaningful entities and finally applying the information. Moreover, students are able to understand how things they learn in school are meaningful in their own lives and in society around them (National Curriculum 2014: 31). Thus, integration has a rather great role in the new National Curriculum and is hard to be dismissed when planning teaching.

In addition to these overall examples of integration, The National Curriculum gives specific advice in teaching English in the upper grades of comprehensive school as English is named to be a subject which can be integrated with different subjects or other subjects can be integrated into English (National Curriculum 2014: 389). Therefore, English is seen as a rather versatile subject when integration is considered. In addition, one of the aims of subject English is to guide students to notice the different grammar rules in English and compare these rules with other language subjects (National Curriculum 2014: 389). Thus, the new National Curriculum guides teachers to integrate languages with each other and finding differences and similarities between them. In addition, it raises the idea of language awareness and taking multilingualism into account, which is a theme to be covered in teaching within every language subject (National Curriculum 2014: 28).

However, although the National Curriculum highlights the importance of integration in schools, teachers are responsible for the realization of integration in the end. Norrena (2015: 61) claims that the National Curriculums have not taken a stance on which teaching methods teachers should use, since the education system has relied on highly-educated teachers. However, the new National Curriculum does guide teachers to an integrative direction, although it does not limit the ways in which integration has to be carried out in practice. In addition, as Atjonen (1990: 36) notes, the written National Curriculum does not transfer to teaching as such as the knowledge, skills and attitudes a teacher has effects how teaching is actually conducted. Indeed, Norrena (2015: 123) argues that teachers' professional and personal qualities and readiness for change will be tested with the new National Curriculum, since teachers' teaching conducts might be challenged with the emphasis on integration. In addition, if teachers have to design how to integrate all the different themes and subjects from scratch and without any help, they might feel it is too troublesome to realize integration in their teaching (Atjonen 1990: 29). This does not incite teachers to use integration in their teaching but rather can make teachers abandon the idea of integration.

4 PREVIOUS STUDIES ON INTEGRATION

Integration itself has been studied from different point-of-views, but in Finland and in a Finnish school context there have only been some studies conducted. Next, I will present three different studies which mainly concern teacher perspectives on integration or how teachers understand integration. The four studies chosen for closer inspection are from Annanpalo (2004), Mylläri (2015) and Weckström (2015), which discuss integration in Finnish schools whereas Lam et al. (2013) concentrate on integration abroad.

The purpose of the study of Annanpalo (2004) was to shed light on the experiences teachers have on integration and on the positive and negative perceptions teachers have of the idea as well. In addition, a part of the study concentrated on which subjects make natural integration connections together, which is interesting for this current study. The study was a case study conducted in the upper grades of comprehensive school and consisted of 18 participants, who were all teachers in the same school. Results in Annanpalo's (2004: 17) study show that teachers found integration to be important, but rather hard to carry out in schools due to time-related issues. In fact, time was mentioned being the biggest hindrance in adding integrative elements into teaching. Teachers were also afraid that integration would increase their workload. Another hardship teachers feared integration would add was, according to Annanpalo (2004: 21), related to co-working and problems which might occur when working with their colleagues. As a case in point, there might simply not be chemistry between two teachers as personalities differ or teachers might have different opinions on suitable teaching methods.

The biggest advantage of integration, though, was noted to be the variation it gives to school days (Annanpalo 2004: 16). Other notable things mentioned were students broadening their perspectives and having a better overall picture of their studied subject matters. In addition, teachers thought that the practical aspects of integration are beneficial to students. Lastly, many teachers enjoyed the fact that social relations

between teachers and students as well as among teachers had improved during integration projects. Annanpalo's (2004: 13) study also found out which subjects teachers would preferably collaborate with. These collaborative connections teachers mentioned were either between mathematics, physics, chemistry and biology, or between mother tongue and other languages, or lastly, between history and religion. However, some teachers claimed that they would be willing to integrate with any other subject. Thus, it is interesting to see how these findings correspond to the results of the current study.

A current study from Mylläri (2015) concentrated on discussing the issues teachers see as the advantages and disadvantages of integration and the factors which effect the realization of integration in schools. The participants of the study, who were five teachers teaching various subjects in the upper grades of comprehensive school, were interviewed. According to Mylläri's (2015: 43) findings, teachers thought that one of the benefits of integration is that it links school and the real world together. In addition, teachers thought that integration leads to more experiential learning situations enabling students to deepen their knowledge and learn things which might not have been learned with some other method. The general opinion was that integration was seen as a concept which contributes to students' social skills and which teachers would be willing to explore (Mylläri 2015: 44-45). According to Mylläri (2015: 46), teachers were, however, worried how it can be difficult to carry out integration in a disciplinedriven school world as subjects have a long history of being taught separately. Other issues related to teachers being concerned if they themselves have enough skills to put integration into practice in their teaching. Lastly, Mylläri (2015: 47, 49) reports how great value was placed on how the new National Curriculum and teaching materials address integration. Teachers see the National Curriculum binding them to organize their teaching in a certain way and teaching materials giving concrete support in the integration process.

Weckström (2015), also studied the conceptions teachers have on integration as the opinions physical and health education teachers have on integration were inspected.

In addition, the difficulties teachers might have faced in integrating these two subjects and how integration would become more popular in schools were discussed. The data consisted of the interviews of eight physical and health education teachers who work in the upper grades of comprehensive school. According to Weckström's (2015: 52) study, integration had a positive effect on more efficient learning as teaching had become more coherent compared to the previous and more scattered information. This also follows the results from Annanpalo's (2004: 16) results. Teachers also claimed that with integration, teaching had become more student-centered (Weckström 2015: 53). Indeed, Weckström (2015: 54) points out how students understood the practicalities of learning as themes which were studied came closer to students' own life and the real world outside school. These findings correspond to Mylläri's (2015: 43) results However, according to Weckström (2015: 67) and also similar to Mylläri's (2015: 46) study, teachers found that having education divided into different subjects is one of the greatest reasons hindering integrative education in addition to strict timetables. In addition, Wectsröm (2015: 68) noted how teachers felt they did not have enough planning with other teachers to carry out integration in practice. Thus, Weckström (2015: 65) also found that teachers had doubts on their own competence if they conducted integration, which came up in Mylläri's (2015: 49) study as well. Lastly, teachers were slightly skeptical if it is possible to achieve the required learning outcomes by using integration in teaching (Weckström 2015: 61).

Lam et al. (2013) investigated the general conceptions teachers have of integrated curriculum as well. The study was a case study in which eleven secondary school teachers from different schools in Singapore were interviewed. Ten out of eleven participants agreed on the fact integration is a beneficial method which develops students' learning and interest. According to Lam et al. (2013), integration had also positive effects on the teachers co-work and team spirit was enhanced, which is similar to Annanpalo's (2014: 16) study. However, participants of the study claimed that more planning time would be needed in order to organize integrative teaching units. In addition, teachers argued that the way the curriculum is designed does not invite teachers to use integration in their teaching, but makes it harder to be realized in

practice. These are findings which were present in the studies of Annanpalo (2004: 17), Weckström (2015: 67) and Mylläri (2015: 46) as well. Another issue Lam et al. (2013) discovered was that teachers felt their knowledge on distinct subjects was often inadequate and they had difficulties in identifying the main ideas and concepts of each subject or theme. Thus, they were not always confident in carrying out integrative units. Lastly, even though teachers had mainly positive outlooks on integration, they were concerned whether integration will threaten the integrity of distinct school subjects (Lam et al. 2013). If teachers were specialized in a certain subject, they felt that integration affects the core of these subjects.

According to the above-mentioned studies, integration is seen to have positive effects especially when students' learning in concerned. However, teachers still struggle with the pressure time and collaboration with other teachers call for, even though working together has often proven to be fruitful. These studies are mainly looking into teachers' perspectives on integration as studies concentrate on the ways teachers would carry out integration in schools and how they find integration as a part of education. In addition, most of the studies have failed to take into account the general outlook among teachers, since interviews have been mainly used as the data gathering method. In fact, Dörnyei (2009: 10) states that interviews provide long and detailed personal explanations, so the studies so far have only covered few opinions on integration. Although these viewpoints are discussed in depth, a general view on the preferences teachers have for integrating different subjects has not been studied. Therefore there is a need for research which sums up an overall view of opinions on integration.

Studies on integrating English into other school subjects have not been carried out into great extent which invites a study with a larger data to be conducted. Thus, the current study is defined to the upper grades of comprehensive school as all of the distinct subjects are mainly taught by different teachers. In the lower grades of comprehensive school integration is mostly the classroom teacher's responsibility as they normally teach almost all of the subjects to the same class. This means that integration requires more collaboration and planning in the upper grades of comprehensive school as more

teachers and subjects are involved. It is also notable that a general view on the opinions English teachers have on integration and, more precisely, on integrating English into other subjects, enables to see some patterns which might occur when teachers are planning how English education will be organized and with which subjects they are most likely to collaborate with. It will also reveal which subjects might be neglected when English is integrated with other subjects. Thus, my research questions are:

- 1. Which subjects would English teachers prefer to integrate with English? Why?
- 2. Which subjects would English teachers not prefer to integrate with English? Why?

5 DATA AND METHODS

5.1 Methodology

The primary object of this study was to form an overall picture of the current attitudes English teachers have towards integrating English with other subjects in the upper grades of comprehensive school. As the aim of the study was to gather a sufficient amount of statistically relevant data in order to make fair generalizations, a questionnaire was used as the data gathering method (Alanen 2011: 160). Indeed, using a questionnaire is justifiable typical of this type of a study, since Dörnyei (2009: 9) states that questionnaires are suited for quantitative and statistical analysis. In addition, this study contains both a quantitative and qualitative side to it, because the questionnaire consists of both closed and open-ended questions. A questionnaire, therefore, suits the study best, since, according to Alanen (2011: 146), they are not only a tool for quantitative research but also enable qualitative research.

A qualitative approach was also chosen as a part of this study so that participants could reflect on their thoughts and expand on the reasons why they consider one subject better for integration than others. Thus, using a qualitative perspective in the form of open-ended was also a means to find out reasons behind English teachers' integration preferences and simultaneously deepen the study. In fact, Alanen (2011:

151) states that the strength of open-ended questions is that they give the participants an opportunity to elaborate on their opinions. Therefore it can be stated that the open-ended questions clarify answers of the multiple questions. Lastly, as the objective was to find out stances and opinions behind teachers' integration choices, many of the questions in the questionnaire were attitudinal questions (Dörnyei 2009: 5). Since the questions were of personal opinions, choosing a questionnaire might let the participants answer more freely compared to a distressed situation with an individual interview. This also enables unpredictable to rise from the data (Alanen 2011: 151).

5.2 Data collection

As already stated, this research was conducted in the form of a questionnaire. The language of the questionnaire was chosen to be Finnish as the study is conducted in Finland and, thus, Finnish is most likely the common first language shared between the participants and the researcher. The questionnaire itself was designed with Webropol and piloted in the beginning of 2016. Piloting the questionnaire with a nearly graduated and a recently graduated English teacher before using it in actual data collection enabled to see the rough duration of the questionnaire and do some minor changes in order to make it more user-friendly. After testing and altering the questionnaire, the actual data was collected during February 2016. The questionnaire was sent to language teachers' e-mail lists and, in addition, individually targeted emails were sent randomly to English teachers around Finland. In more detail, teachers, who were teaching English in the upper grades of comprehensive school were chosen from various schools so that the data would consist of the answers of teachers who are evenly from different parts of Finland. Thus, these schools were located in smaller and bigger cities as well as in the countryside. It must be pointed out that a response rate cannot be given since answers, in addition to individually sent e-mails, came from different e-mail lists which have an unknown number of readers.

Altogether 49 participants, who were all English teachers in the upper grades of comprehensive school, took part in the study. In total 8 out of the 49 participants (16%)

were men and the rest 43 (84%) were women. This roughly represents the general image of the English teacher profession being dominated by women leaving men in a minor role. The teachers' careers differed from under five years of experience to over 30 years of teaching and they were geographically located in different parts of Finland. In addition, teachers stated to have varying subject combinations they either taught or were qualified in when the questionnaire was conducted. However, around 70% of the participants stated they teach another language (either Swedish, German, French, Russian or mother tongue) in addition to English. Apart from languages, other subjects were not that popular as only some individuals stated to teach these subjects. All in all, as teachers from various backgrounds and subject combinations took part in study, the participants present a rather reliable sample. However, as the sample was rather narrow, the answers and results were not compared to background information.

The questionnaire (Appendix 1) itself started with an opening page which explained briefly the concept of integration, so that participants answering the questionnaire would be aware of the different issues integration can cover and what the current study considers as integration. This might have also served as a way to ensure that participants were conscious of the meaning of the concept when filling in the questionnaire, even though integration is already and most likely a rather common and well-known concept among teachers.

Altogether the number of questions in the questionnaire was 12. Three of these were background questions and the nine others were either closed or open-ended questions around integration. In the three closed questions of integration teachers were able to choose one or more subjects as preferred, plausible or undesirable for integration. After each closed question there was an open-ended question allowing teachers to elaborate on their thoughts and give reason to their choices more freely. In addition, there were three other questions in which participants could discuss firstly, their integration experiences, secondly, why they have not used integration and, lastly, give more general opinions on integration. An issue to be noted is that not all participants answered to every closed or open-ended question of the questionnaire. However, the

response rate inside the questionnaire for each question nevertheless stayed high varying from 65% to 100% and, thus, enables to make generalizations regarding the data and results for this study.

5.3 Methods of analysis

This study used two types of analysis methods. First, simple statistical analysis was used for the closed questions which were analyzed numerically with Webropol. Thus, the percentage value for each subject was counted to have a general outlook on most and least preferred subjects. In addition, a qualitative approach was used to decode the data for open-ended questions in the questionnaire. Hence, content analysis, which can be used as a basic method of analysis for qualitative studies, was applied (Tuomi and Sarajärvi 2013: 91). Content analysis is used to interpret and code texts or textual material. Thus, when the data had been collected, it was first read through to get an overall picture of the results. After this each open-ended question was examined and coded. Coding was used to structure the data and see what it contains (Tuomi and Sarajärvi 2013: 92). However, as However, as Dörnyei and Taguchi (2009: 98) state, since open-ended questions are not pre-coded, the process of analyzing them is slightly more complicated compared to closed questions. The answers were, nevertheless, divided into distinct categories according to different occurring classes. The first division was if the open-ended questions related strictly to the subject issues, or if they were concerned with other issues not included in the subject matter. Other categories within these two categories were the common themes subjects have, the language of distinct subjects, time-related issues, teachers' own competence, how school days are organized and social issues. Then how many times each class occurs in the data for each question was counted according to the principles of content analysis (Tuomi and Sarajärvi 2013: 93).

6 TEACHERS' PERCEPTIONS OF INTEGRATING ENGLISH WITH OTHER SUBJECTS

The results of the current study will be examined and discussed in this chapter. The chapter will begin with a general outlook on the preferences teachers had for distinct subjects, so in other words the answers to the closed questions, will be presented. Thus, the overall opinions on subjects teachers would like to integrate with English are presented first in chapter 6.1.1. Secondly, the subjects teachers found as plausible integration partners for English are introduced in section 6.1.2. Thirdly, the subjects teachers do not see as plausible integration partners for English are displayed in section 6.1.3. After looking into the numerical side of the study, the findings of the qualitative part of study, including the reasoning teachers had for preferring to integrate distinct subjects with English as well as general opinions on integration, will be elaborated from section 6.2 onwards.

6.1 An outlook on integrating English with other subjects

6.1.1 Subjects English teachers would prefer as integration partners

In order to receive a numerical outlook on the subjects English teachers would prefer to integrate with English, the participants were asked to choose the most pleasing subjects from a list, in which the most common subjects present in Finnish schools were included. Teachers' choices were not limited to one subject only as one or more subjects could be chosen from the list. Examining the data, it was clearly visible that some subjects were more or less popular when integration is regarded, which means that there was dispersion in the data (Table 1). In fact, the top three subjects teachers chose as preferable integration partners were history (65%), geography (63%) and home economics (55%). Music was a popular subject as well as it received 45% of the total amount of the votes from the participants. In addition, 41% of the choices went to social studies, as many teachers considered it as a subject which they would like to

integrate with English. The practical and arts subjects all received a varying amount of votes some being more popular than others, so they cannot be treated as a homogenous group of subjects. As already mentioned, home economics and music are high on the list whereas technical work is among the last subjects receiving only few votes. In addition, mathematical subjects, such as mathematics, physics and chemistry, are all among the eight subjects, which received the least votes. Next, all of the subjects, also those whose percentual figures were not yet mentioned, are presented in a histogram.

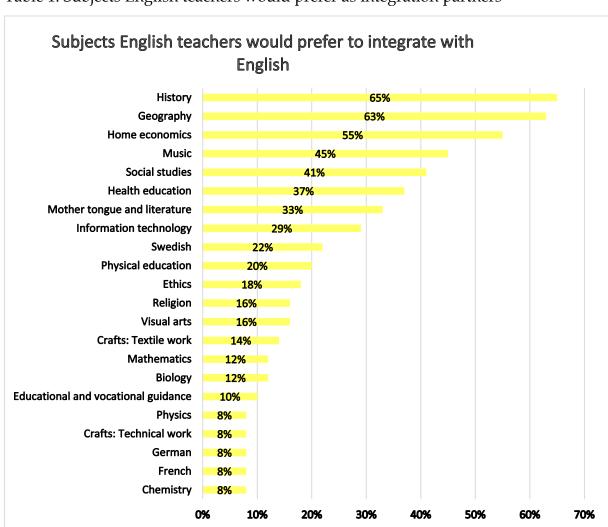


Table 1. Subjects English teachers would prefer as integration partners

A point to mention is that even though English teachers had mainly chosen one or some other number of subjects as preferable integration partners, many of them stated in the open-ended question section that it would nevertheless be convenient for them to integrate English with any subject on the list. Precisely 7 out of 37 (19%) of teachers found all subjects to be equally favorable to integrate with English. The same attitude was visible in Annanpalo's (2004) study, as some subject teachers claimed to be prepared to integrate their own subject with any other subject. In addition, the results are quite the contrary to Annanpalo's (2004) already mentioned study in which teachers found the most natural collaborations to happen between mother tongue and other languages. However, even though mother tongue and Swedish were rather popular, French and German did not receive many votes. History and geography, on the other hand, were found to work well together, but not in conjunction with languages. The reasoning for these answers will looked into depth in section 6.2.1.

6.1.2 Subjects English teachers would see as plausible integration partners

In addition to asking which subjects teachers find as preferable integration partners, another object was to form a picture of the subjects English teachers would prefer as possible integration partners. Therefore, the participants were asked to, similarly to the previous question, choose from a list of subjects the ones with which integration would most likely happen in practice. The results were mostly identical to the ones in the previous question of preferred integration partners, as the ranking order stayed almost the same. However, some changes can be seen in the histogram (Table 2), but they mainly concerned subjects behind the top five subjects. Thus, geography and history still remained as the two most popular subjects, although when observing them from a probability point-of-view, these aforementioned subjects gathered equally 73% of the votes. The next two places were also identical as home economics came in third with 62% and music fourth with 60% of the votes. Social studies kept the fifth place receiving 51% of the total number of votes.

An interesting detail can be found from languages which, except for mother tongue, were lower down the list compared to the question of preferred subjects. However, it has to be mentioned that compared to the question of preferred integration partners,

the votes spread more evenly between all of the subjects. In addition, similar to the preferred subjects, there is dispersion in the votes for practical and arts subjects, as the subjects are not situated one after the other in the histogram. Mathematical subjects can, yet again, be found in the lower part of histogram. The reasoning for these answers will be presented thoroughly in section 6.2.2. Now, the exact percentual figures of each subject are introduced in a histogram (Table 2).

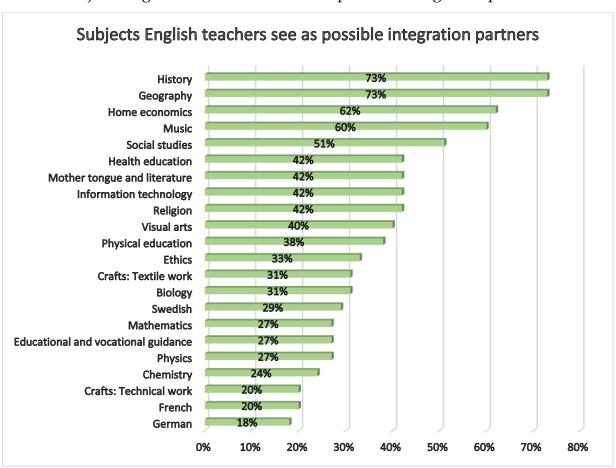
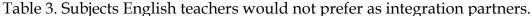


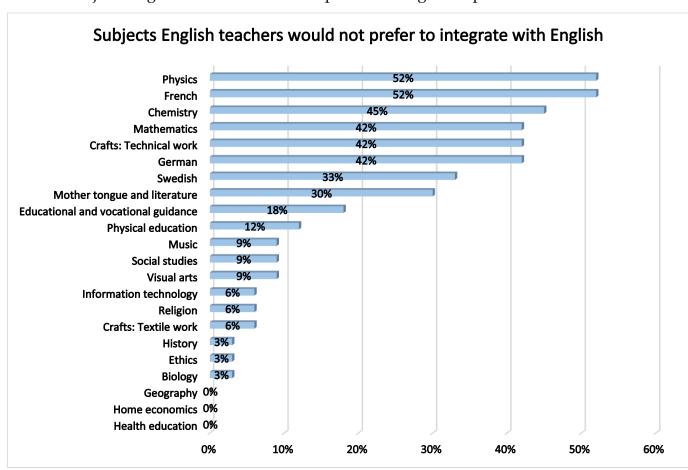
Table 2. Subjects English teachers would see as plausible integration partners

6.1.3 Subjects English teachers would not prefer as integration partners

Lastly, one aim of this study was to figure out if English teachers had strong opinions against some subjects when integration is considered. Thus, the participants were asked to choose subjects they would not prefer to integrate with English from a list of subjects. As expected, subjects which received the least votes in the questions

regarding popularity and plausibility gathered now most of the votes. Therefore, teachers were least interested in collaborating with French and physics, which both received 52% of the votes. Chemistry held the third place by drawing 46% of the total amount of votes. In addition to the already mentioned subjects, mathematics, German and technical work in handicrafts all were chosen as rather less preferred integration subjects receiving 42% of the overall votes. Thus, it can be stated that the mathematical subjects in general were not preferred by English teachers as integration partners. In addition to French, other languages such as German, Swedish and mother tongue did not receive that many votes and can be found in the upper half of the histogram (Table 3). Following the results of the previous two questions, subjects which were highly placed in preference or plausibility were now holding the last places on the list. In fact, three subjects, geography, home economics and health education did not receive any votes at all from the participants. The number of votes other subjects received can be seen in the histogram presented next (Table 3).





It should be pointed out that a rather great number of participants (16 out of 49) did not answer to the question of least preferred subjects at all. Therefore, the sample for this question is smaller and also slightly less comprehensive compared to the other two questions. However, leaving a question unanswered is not exceptional as Dörnyei and Taguchi (2009: 7) remind that participants can leave some questions out either by mistake or if the question presented was not preferred. The current question in mind, teachers might have not been comfortable in answering questions which look into negative opinions. In addition, teachers might have left the closed question unanswered if they thought every subject as a viable option for integration similarly to the question concerning preferred integration partners in section 6.1.1. Indeed, some teachers clarified their answers to the closed question by stating in the open-ended section that they see integration possible with all subjects, and, thus, did not choose a subject or subjects from the subject list. Teachers could have been unsure or indecisive of the least preferred subjects and, thus, leave the question unanswered as well. Nevertheless, the more thorough answers and reasons teachers gave for this question will be introduced in section 6.2.3.

6.2 Details of integration choices

In order to receive a better insight on the participants' preferences regarding the integration of different subjects, the data from open-ended questions was observed and divided into meaningful groups according to popular themes which arouse from the English teachers' answers. In general, reasoning behind choosing or preferring different subjects over others varied considerably. Perhaps this is because subject preferences are of personal opinion and teachers carry with them different attitudes towards distinct subjects. These attitudes can, too, indicate how comfortable teachers feel of their own expertise on teaching certain subjects which can be outside their comfort zone. In addition, a point concerning more fundamental ideas is how teachers can have rather different opinions on integration itself. This can, for one part have an effect on teachers' subject choices when integrating English with other subjects. Thus, teachers favoring integration might see more potential in various subjects compared

to those teachers who are not the greatest advocates of integration. Therefore, many underlying reasons, all of which are not appearing in the data of this current study, might be behind English teachers' integration choices. Now, the elaborated opinions on preferred, plausible and unwanted integration subjects will be discussed in the next three sections.

6.2.1 Reasoning behind preferred subjects

First and foremost, teachers stated that one of the greatest reasons for choosing history, geography, home economics and music as the best suitable integration partners for English was that making connections feels natural between these subjects and that in practice it would be easy to integrate English with the abovementioned subjects. In total 14 out of 43 (33%) teachers valued the naturalness and easiness of combining English with the most preferred subjects, which many explained to derive from already existing connections between the subjects. More precisely, 7 out of 43 teachers (16%) claimed that a great deal of this easiness comes from the fact that English as a subject covers many themes which are also dealt with in history, geography, home economics and music. Indeed, Pitkänen (1992: 13-14) states English language books have for long covered issues such as the geography and cultural issues of Englishspeaking countries, which might explain why teachers state that these subjects have common ground in English. Therefore, these shared themes with other subjects arise naturally in the English material and, thus, makes it rather effortless for teachers to find linking connections between subjects. Here are some of the answers in which teachers motivate why they would prefer history, geography, home economics or music as preferred integration partners:

⁽¹⁾ T47: Tuntuu luontevalta yhdistää englanti esim. jonkin engl.kielisen maan historiaan, ruokakulttuuriin.

It feels natural to connect English with, for example, an English-speaking country's history, cuisine.

⁽²⁾ T33: Ne sisältävät aihepiirejä, joihin viitataan monesti myös englannin tunneilla käsiteltävissä teksteissä.

They contain subject themes, which are often referred to in texts used in English lessons.

(3) T17: Englannintunneilla käsitellään jo näitä aineita, mutta englanniksi. Enkunopettaja opettaa jo nyt englanninkielisten maiden maantiedettä, kulttuuria, eläimistöä, yhteiskunnallisia ilmiöitä.

These subjects are already handled in English lessons, but in English. English teachers are already teaching the geography, culture, fauna and social phenomena of English-speaking countries.

In addition to simply making connections with history, geography, home economics and music, English teachers saw integrating these subjects together with English as a way to deepen students' knowledge on the various linking themes. Thus, covering naturally rising themes was seen as beneficial for students, which is an issue confirmed and already presented by Koppinen and Pasanen (1991: 38) in section 2.3. This is also an answer which came up in the studies of Mylläri (2015) and Weckström (2015). Teachers claimed that students would become more acquainted with the target language's culture and notice how English works as a tool with which students can find more information on certain themes. The advantage of being able to deepen students' knowledge was also present in those teachers' answers who stated languages being suitable integration partners for English. These teachers claimed that in languages, comparing and contrasting grammar, vocabulary and other cultural issues would make students broaden their perspectives on languages. In addition, using languages with different subjects would be a natural way to add language learning into education. In fact, all of the so far mentioned notions go hand in hand with the idea of integration deepening students' knowledge and making meaningful connections beyond subjects and their clear boundaries, which was presented in the advantages integration is said to have in section 2.4.1. Here, a teacher claims the positive effects of integrating subjects with English:

(4) T35: Oppilaat saavat laajemman näkemyksen opiskeltavista aiheista, ja sitä tietoa he voisivat käyttää myös muilla elämän alueilla ja myöhemmin elämässä. Se on osaa laajempaa sivistystä.

Students receive a broader perspective on the studied themes and they could use this information in other aspects of life and later in life. It is a part of a wide and all-round education.

Another aspect of the naturalness of combining English with the already-mentioned subjects is, according to the English teachers, the amount of material available for

different school subjects in English. The present world in which information is available online enables access to different types of material from written to spoken in different languages. As a case of point of these materials teachers mentioned news sites and webpages being easy to use in integrative teaching. Apart from the four most preferred subjects to integrate with English, teachers mentioned home economics and handicrafts for being subjects which have suitable material available online. For example, recipes and instructions were claimed to be easy access materials on the internet and in other sources as well. Thus, the use of authentic material in English would not be difficult during lessons as there are so many sources which can be utilized. Here an English teacher argues why integrating handicrafts with English is preferred:

(5) T45: Käsitöihin löytyy valtavasti tietoa englanninkielellä. Maailmanlaajuisesti kädentöiden ja ohjeiden esittely on bloggaajille ja vloggaajille tärkeää. Youtube ohjeiden kuunteleminen ja katsominen englanniksi kehittää käytännön englanninkielentaitoa. There's a lot of information on handicrafts (textile work) online. It is important for bloggers and vloggers to present their work and instructions worldwide. Listening and looking instructions in English on Youtube develops practical English skills.

In addition, the already mentioned natural connections rise, according to 6 out of 43 (14%) participants, from simple enough vocabulary many subjects have. Therefore, when vocabulary is rather uncomplicated for students, it might be more likely for teachers to integrate that subject with English as the content of the subject is accessible and understandable for students. Indeed, English teachers claim that vocabulary in history, geography, home economics, health education and information technology is on an understandable level or students are already familiar with some of the subject-specific words beforehand. Many students use vocabulary related to these subjects in practice on a daily basis and are, thus, acquainted with. For example, information technology is present in students' everyday lives and many applications or other platforms are in English. Thus, students are already acquainted with the basic terminology related to information technology, devices and the functions of them. Therefore, integrating these subjects together would go rather naturally. Music was also claimed to be a global subject enabling students to constantly hear English around them as many artists use the global language in their lyrics.

(6) T2: Tietotekniikassa ajattelisin, että onnistuu luontevasti, koska alan sanasto on aika tuttua oppilaille.

In information technology I think that it would work out naturally, because the vocabulary of the subject area is pretty familiar to students.

(7) T43: Nuoret törmäävät englantiin tietokoneiden ja musiikin alalla, joten heillä olisi varmasti siihen liittyvää sanastoa jo entisestään.

Young people run into English in computer and music fields, so they certainly have vocabulary related to these beforehand.

Lastly, integration seemed also to be a question of personal opinions. Indeed, 6 out of 43 (14%) English teachers claimed that subjective reasons affect their preference for certain subjects. The participants elaborated the topic further by stating that they are themselves interested in the subjects they chose as preferred integration partners or that their own expertise in the chosen subjects is rather profound and, thus, they would prefer to integrate English with these subjects. Connections between subjects can therefore be stated to rise if teachers feel comfortable in integrating English with a preferred subject. Similarly, a teacher explains why she finds her own strengths helping the integration process with music:

(8) T31: Harrastan musiikkia ja olen kulkenut myös kansainvälisillä musiikkileireillä, joten terminologia on valmiiksi tuttua, ja voisin varmaan jotenkin olla myös musiikinopelle apuopena.

Music is my hobby and I have been to international music camps, so I am familiar with the terminology and I could somehow help the music teacher as an assisting teacher.

Therefore, it is likely that teachers' own expertise in certain subjects and even being a qualified teacher of a certain subject might have an effect on the integration choices teachers made in the numerical section of the study (6.1.1). In fact, it is visible from the data that almost all of those teachers who claimed to teach a certain subject or be qualified teachers of another subject in addition to English preferred these subjects as integration partners with English. Thus, it seems that if teachers are more familiar with a subject and the contents of it, they are more likely to prefer those subjects in integrative projects. As Norrena (2015: 101) claims, every subject teacher is a professional of the substance they teach. In addition to the subjects teachers teach, they

can have other strong areas of expertise related to their hobbies or other studies. Therefore, it would be worthwhile considering these strengths and how they can be utilized broadly in schools. Detecting and using these strengths in possible and future integration projects would be fruitful when planning and realizing integration in schools.

6.2.2 Factors behind choices for plausible integration partners

When looking at the answers to the reason why some subjects are more plausibly integrated with English than others, teachers provided opinions some which occurred already in the data for most preferred subjects in the previous section. As already mentioned, the ranking order did not change with the most popular subjects in mind. Thus, 10 out of 42 (24%) of the teachers found that in practice, the greatest plausibility issue was that they could and also would like to make use of the shared similar themes English and many content subjects have. Therefore, English was again claimed to be a natural subject to integrate with history, geography, home economics and music. Indeed, if common themes arise from two or more subjects, it does not require as much work from teachers as gathering more background information or making more artificial connections between subjects. Therefore, teachers saw these subjects as being potential integration partners for English.

Similar to the question of preferred subjects, if teachers already taught or had studied another subject in addition to English, they many times also claimed that integrating English into this subject or subjects would most likely happen in the real school world. Therefore a claim could be made that if the teacher has expertise on another subject in addition to English they are willing to connect that subject with English and see it as a plausible option as well for integration. For example, a teacher who taught religion in addition to English thought that because she is a qualified religion teacher, integrating English with religion would work well, since she masters the content subject. In this case, the teacher would not necessarily need a religion teacher in the integration

process, which means that the integrative unit could be planned and carried out with only one teacher involved in the process.

However, compared to the answers to the question of preferred subjects in section 6.2.1, issues which were not that strongly related to the contents or to the nature of different subjects were mentioned in these answers. In fact, many teachers claimed social reasons to have an effect in the integration process. In total, 8 out of 42 (19%) of the teachers claimed how willing other teachers are to integration itself to be one of the key features in why integration would happen with various subjects. Teachers claimed that integration is more plausible with certain subjects, because the teachers of these subjects have a positive stance on integration, whereas others claimed that integration is less likely to happen because of the contrary views teachers have on integration. Here a teacher states how attitudes are the core of integration processes:

(9) T43: Oppiainetta tärkeämpi on, että toisen aineen opettaja on innostunut integraatiosta. More important than the subject is that the other subject teacher is excited about integration.

Annanpalo (2004: 12) had similar findings in her study as well as the teachers' desire to co-operate was one of the greatest factors influencing the realization of integration. Thus, the importance of collaboration is highlighted in the integration process. As presented in section 2.3.2, how prepared teachers are to plan and collaborate is central in the realization of integration. Indeed, even if teachers wanted to integrate English with a certain subject, the fact that the teacher of the other subject is not interested or willing to integrate subjects, makes it less plausible to integrate that subject with English. Thus, relationships and collaboration with other teachers can be one of the main hindrances in front of integration. Teachers elaborated by stating that integration requires more work with other teachers, which in practice involves seamless teamwork. This result also is equivalent to Annanpalo's (2004) findings.

In addition, a point which was mentioned was how teachers feel that it is hard to find a suitable teacher partner, who shares the same ideas on integration and would like to carry out an integrative project. In fact, teachers claimed that many of their colleagues do not seem to be interested in the idea of integration at all or not willing to commit to integrative projects. As one teacher exemplified, teachers might state to their colleagues how advantageous integration is, but when extra planning and work is needed in order to realize an integrative unit, integration does not seem a good idea after all. Norrena (2015: 113), nevertheless, claims that many teachers are in general willing to work together. However, if the school conventions and norms are against integration, many teachers want to act along these norms and, in this case, ignore integration. Therefore, it can be hard for individual teachers to start making changes, as these developments can mean changes in all levels of school. In fact, as integration might often require changes in the ways education is organized in practice, and thus, require involvement of other quarters than just the teachers.

An issue to be mentioned is that the majority of teachers, precisely 31 out of 45 (69%) teachers had already integrated English with another subject or subjects, so they had formed some connections with certain subjects by the time this study was made. In fact, most of the integration (32%) had happened between English and other languages, such as mother tongue or Swedish. In total, 29% of the integration had happened with home economics, 18% with history and social studies, 14% with music and 11% with visual arts. In addition, biology, physical education, physics, religion and mathematics received single mentions from the English teachers. If other languages and mother tongue are not taken into consideration, the subjects which have already been involved in integration processes are those which were high on the lists for preferred and plausible integration partners. Thus, it is interesting to see that even though languages did not receive that many votes when asking for preferred or plausible integration partners, in reality English teachers had used integration and mainly between different languages.

The mentioned integrative entities were stated to be integration periods or projects between two or multiple subjects, specially organized theme days, shorter integration tasks or doing background research. During integrative projects, a cross-curricular or other theme was chosen as the main theme for the project. One integration project was

on Anne Frank and it involved collaboration between English, history and mother tongue. During the project, students read the story of Anne Frank in English, discussed holocaust in history and, finally, a multimedia presentation was organized in mother tongue. In shorter integration tasks students had, for example, translated their curriculum vitae planned in their mother tongue or in social studies into English, discussed and compared grammar in mother tongue and English and had a pronunciation workshop in which English songs were sung. Lastly, an example when integration was present concerned background research as students found inspiration for their handicraft work online in foreign languages. Thus, integration had been carried out in various ways.

A notable issue is that some of the teachers stated that they would be willing to carry out a similar type of integration project with the same subject they had already done in the past. This might have affected the closed question part of this study if teachers have already had positive experiences on integrating certain subjects together, they might have also chosen this subject or subjects as plausible subjects they could integrate with English. These experiments might have, therefore, resulted in teachers claiming the subjects which have been involved in integration being more plausible integration partners, as they have already an existing model for a conducted integration project.

6.2.3 Reasoning behind least preferred subjects

The answers to the open-ended questions regarding least preferred integration partners were related to the answers given in the question of most preferred subjects. However, these opinions handled the same themes, but from an opposite perspective. Firstly, the greatest reason for English teachers to not prefer to integrate English with certain subjects, and especially with physics, French and chemistry was that 12 out of 37 (32%) of the participants found their knowledge and competence was not profound enough. Indeed, teachers expanded this by stating that they could not bring any additional value to the other subject integrated with English. Thus, teachers were

unsure whether they could carry out their teaching on a sufficient level in these subjects. Mylläri (2015) and Weckström (2015) noted the same issues in their studies as teachers considered they own competence in integration and the knowledge of other subjects hindering them from integrating subjects together. What is noteworthy is that the subjects English teachers listed as the least preferred ones (section 6.1.3) are mainly mathematical subjects which do not have common grounds with languages or language teaching. In addition, French was a subject none of the participants claimed to be proficient in or teaching currently in school, which might explain its high ranking in the histogram (Table 3). Next, a teacher sums up many of the opinions which were related to the least preferred subjects:

(10) T47: Matematiikka yms. eivät ole itselleni mieluisia aineita, en tunne niiden opetustapoja, koen ne "vaikeiksi" jo omalla äidinkielellä.

I do not find mathematics etc. as enjoyable subjects, I do not know their pedagogy and I find them hard even in my own mother tongue.

Indeed, Koppinen and Pasanen (1981: 11) state that problems can arise with integration if teachers involved in designing the integrative unit have very different traditions of teaching or if the subjects require different type of didactic thinking. These can both be related to the basic nature, which is typical of and intrinsic to certain subjects. Some of the teachers also commented that in addition to lack of competence, they also do not have an interest in these subjects. This can also be seen in the example presented above. In addition, and as in the previous sections, personal reasons and attitudes teachers carry with them had an impact and were among one of the greatest reasons for many teachers for choosing a subject to be less preferred than some other.

In addition, 3 out 37 (11%) teachers claimed that relationships with other teachers affected their choices for this question. Teachers elaborated on their answers by stating that they would like to integrate or try integration in practice, but other teachers' attitudes are not in favor of integration. In addition, chemistry between teachers was mentioned as a factor related to unwanted integration partners. As already stated before, integration requires a great deal of team work. Therefore, according to Norrena

(2015: 138), it is central how teachers interact with each other and how individuals are acknowledged in the work community.

(13) T18: Oikeastaan olisin valmis integroimaan englantia missä vain tilaisuus tulisi, mutta valitettavasti mahdollisuudet ovat olleet suht vähäiset muiden opettajien nihkeän suhtautumisen vuoksi.

In reality I would be prepared to integrate English on any occasion, but unfortunately the possibilities have been rare due to other teachers being sticky about it.

(14) T31: Rehellisesti sanottuna ensimmäisen osalta myös henkilökemia on tekijä, jota ei voi jättää täysin pois laskuista, vaikkei se oikeastaan oppiaineeseen liitykään.

Honestly speaking, as for the first (subject) is concerned, chemistry between teachers is an issue, which cannot be left out, even though it does not relate to the subject.

Another interesting issue which appeared in the data was that 11 out of 37 (30%) of the teachers thought that integrating languages with other languages, either foreign languages or the mother tongue Finnish, does not work easily in practice. English teachers stated that integrating different languages was seen too demanding and confusing for students and especially for those, who have difficulties in learning languages. Some teachers did not see integrating languages together as beneficial. Next, an English teacher explains a view which was common among teachers who did not see languages as suitable integration partners:

(11) T16: Kaikkien vieraitten kielten opetuksessa toki viitataan jatkuvasti muihinkin oppilaitten osaamiin kieliin, mutta mitään varsinaista etua en näkisi saavutettavan jos yritetään oppia kahta eri kieltä yhtä aikaa. Jokin teemapäivä tai vastaava toki voisi olla, jossa vaikka vertailtaisiin jotain kielioppirakennetta tai sanastoa eri kielissä. Uskon kuitenkin, että integroinnin hyödyt ovat suurimmat integroitaessa kieltä johonkin reaaliaineeseen, jolloin oppimisesta saataisiin käytännönläheisempää myös niille, jotka eivät tähtää kielen ammattilaisiksi.

In all foreign language teaching references to other languages are made constantly, but I do not see a true benefit gained if two languages are trying to be learnt simultaneously. A theme day or something similar could be organized, in which a grammar issue or certain vocabulary would be compared between different languages. I believe, though, that the biggest advantages of integration will be received when a language is integrated into a content subject, and learning would become more practical for those, who do not aim to become language experts.

Regardless of these opposing arguments, the new National Curriculum (2014: 322) explicitly states that mother tongue and foreign languages form natural integration partners. Even though there were conflicting views on integrating languages, 4 out of

37 (11%) teachers answered contrary to the presented opinions against integrating languages together by stating that it is just as possible and usually meaningful to integrate English with other languages and even with the mother tongue, which usually in this Finnish context is Finnish. Indeed, one teacher claimed that both subjects, English and mother tongue teach key features of certain text types, such as a curriculum vitae, and it is, thus, justified to combine these two languages. Moreover, one of the claims some teachers made was that references to other languages are made all the time during English lessons.

This goes hand in hand with the already mentioned new National Curriculum (2014: 389) and the aim English as a language has in making students notice the different grammar rules in English and compare these rules with other language subjects. Related to this, the National Curriculum of 2014 addresses language awareness as well. In fact, one teacher claimed that integrating English with other languages helps students learn English and what is characteristic of it. Koppinen and Pasanen (1981: 6) confirm this by stating that the collaboration between a foreign language and mother tongue enhances students' willingness and skills to use languages in different contexts for distinct purposes. In addition, comparing languages with each other is useful especially when new things are learned as students realize how the new learnt issue is connected to other phenomena in languages which they are already familiar with. (Koppinen and Pasanen 1991: 29). All in all, it is interesting how teachers have opposite opinions on integrating languages together and how a great number of teachers do not agree with the National Curriculum of 2014's idea of finding connections between languages.

In addition, vocabulary was an issue which appeared in answers regarding the reasons why teachers would not like to integrate certain subjects with English. The same topic occurred in the previous two sections concerning preferred and plausible integration partners as well. Indeed, 7 out of 37 (19%) teachers found that vocabulary in some subjects, especially in social studies and physics, is too demanding and specific for students and, thus, teachers would not prefer to integrate these subjects with English.

Teachers elaborated the matter in their answers by claiming that some concepts are hard to grasp since they do not have an equivalent in the Finnish language or because some system or way of operating does not exist in Finland. Therefore, teachers were concerned of students' understanding if vocabulary is too difficult and some were of the opinion that students should first comprehend the studied concept in Finnish before learning it in English. Here a teacher explains a view many other teachers claimed as well to be true:

(12) T47: Monilla oppilailla on yläkouluun tullessaan hyvinkin vajavainen peruskielitaito, joten en koe integrointia kovinkaan käyttökelpoisena oppilaille, jotka eivät oikeasti ymmärrä esim. hidastempoista engl.kielistä puhetta eivätkä osaa itse tuottaa juuri mitään englanniksi. Many students have insufficient English skills when they start studying in the upper grades of comprehensive school, so I do not see integration to be practical for students, who do not really understand e.g. slowly spoken English and can produce barely nothing in English.

Pitkänen (1990: 12) also notices this by stating that there can be many students who do not understand and learn the content if teaching is English-mediated. Therefore a question to be asked is whether integrating other subjects with English complicates learning for those students who are already struggling with English and if it set students in unequal positions. In practice, a student might be motivated and proficient in geography, but due to the fact that the subject is integrated with English, the student struggles to understand what the concepts or ideas presented are in reality. In addition, teachers themselves claimed that the size of their own vocabulary in certain subjects and fields is not vast enough to carry out integration.

As seen in this section, the choice for least preferred integration partners is not always very simple. Issues related to the self, such as the idea of one's own competence or preferences between subjects is a common factor affecting the realization of integration. In addition, as at least one of the integrated subjects is a language, teachers were concerned whether the vocabulary is too demanding for students. Moreover, the idea to teach languages in conjunction raised various thoughts, which were either against or for learning languages together. Lastly, social reasons, and mainly the attitudes other teachers in schools have for integration were highlighted as a reason affecting some subjects being less preferred than others. Thus, the lack of chemistry

between teachers impacts how willing teachers are to reach out to particular individuals when wanting to plan an integrative teaching unit requiring co-working from two or more teachers.

6.3 The prospects for integration

As already discussed in chapter 3, integration and cross-curricular themes have a rather great role in the National Curriculum of 2014 affecting now even more than before how education is organized. This also means that teachers have to add integration to their teaching, even though they would not be very keen on integration itself. Nevertheless, according to the findings, 41% of the teachers explicitly stated to have a positive outlook on integration and supported the National Curriculum of 2014's principle of adding integration to schools and education. Indeed, many of these teachers expressed integration being a great and long-awaited idea, which they were already anticipating to test in practice. Other advocates of integration elaborated the positive sides of integration further by stating that integration will remove overlapping between different subjects, which will also reduce the amount of work for teachers. In addition, claims were made for the benefit integration has for students and which were already discussed in in section 6.2.1. Indeed, some teachers argued that integration will enable students to grasp concepts and ideas as a whole and, thus, prepare students for their future life after school. These opinions go hand in hand with the already presented advantages of integration in section 2.4.1. Some of the participants summed up this general view on integration:

- (15) T19: Mielestäni se on erittäin hyvä idea ja mahdollistaa opetuksen tekemisen oppilaille mielenkiintoisemmiksi ja monipuolisemmiksi sekä oppimisen uudella tavalla. Se edellyttää opettajilta myönteistä asennoitumista integraatioon ja hyvää yhteistyöhenkeä ja yhteistyöhalukkuutta.
- I think it is a great idea which enables to make teaching more interesting and diverse for students and learning to happen in a new way. This requires a positive attitude towards integration from teachers and good team spirit and a desire to co-operate.
- (16) T17: Tulevan opsin laaja-alaiset opintokokonaisuudet ovat juuri tätä, ainerajat ylittävää yhteistyötä eri aineiden välillä. Säästää kaikkien aikaa ja energiaa kun jokaisen ei tarvitse vääntää samaa asiaa alusta uudestaan ja uudestaan. Oppilaallekin syntyy toivottavasti

parempi kokonaiskäsitys asiasta kuin silppuamalla se irrallisiksi yksityiskohdiksi eri oppiaineisiin.

The cross-curricular themes in the forthcoming National Curriculum are exactly this, collaboration between and beyond subjects. It saves everyone's time and energy when each teacher does not have to explain the same thing over and over again. Hopefully students will also receive a better overall picture of an issue than if it was chopped into unconnected details in different subjects.

Although many of the English teachers were excited and eagerly waiting for the National Curriculum of 2014 to come into effect, some had more reserved opinions. In fact, some of the participants highlighted the importance of proper planning which integrative units often require more compared to subject-centered teaching. This is also a concern raised in the section of disadvantages of integration (2.4.2). Indeed, and as stated before, integrative units will not succeed, if there is not enough planning and collaboration between teachers. In addition, some were afraid that the National Curriculum of 2014's stress on integration and cross-curricular themes will result in connections between distinct subjects becoming unnatural and forced as teachers are obliged to plan integrative units. Here are examples of some of the more reserved opinions:

(17) T42: Huolellinen suunnittelu ja hyvä ohjeistus ovat tarpeen onnistuneen lopputuloksen saamiseksi.

Careful planning and good instructions are necessary in order to have a successful outcome.

(18) T31: Minusta tästä asiasta vaahdotaan nykyään tarpeettoman paljon. Eikös koulussa ole järkevää toimia, niin kuin on järkevää toimia, ja jos oppiaineiden yhteistyö on mielekästä, sitä tehdään, ja jos se taas ei vaikuta mielekkäältä, miksi sitä pitäisi sinne väkisin vääntää ja yrittää tehdä siitä itsetarkoitus?

In my opinion, there is too much ranting on this subject nowadays. Isn't it wise to act as it is reasonable to act, and if collaboration between subjects is meaningful, it is realized, and if it is not meaningful, why should it be forced and made an end itself?

Even though teachers mainly had a positive outlook on integration, they expressed their concern over time-related issues in the realization of integration. In total 15 out 32 (47%) teachers claimed that in practice there simply might not be enough time to integrate subjects together, since integration itself is a rather time-consuming process. Thus, integration is seen as something which involves extra work. This goes hand in hand with Annanpalo (2004) and Weckström's (2015) already mentioned studies,

which also show that integration mainly is not carried out because integration is timeconsuming and teachers do not have time or energy to devote to integration. This raises thoughts on how teachers will be able to plan integrative units in the future, when integration is made a prominent part of teaching and is not only dependent on how teachers cope with extra work.

(19) T41: Tosiasia on myös se, että integraatioon kuluu paljon sekä suunnitteluaikaa että aikaa oppitunneista, eikä kaikkien ideoiden toteutus ole mahdollista.

A fact is also that integration takes a lot of planning time and it also time-consuming during lessons, so it is not possible to carry out all ideas.

(20) T12: Uskon, että suurin syy on yhteisen suunnitteluajan puute. Aineenopettajat kokevat myös, että oma aine on tärkeä, eikä siihen sovi "sotkea" muita aineita, eikä nähdä oppimista kokonaisuutena!

In addition, Norrena (2015: 62) claims that teachers and schools are currently lacking practical tools to add cross-curricular themes and integrative units into their teaching. Koppinen and Pasanen (1981: 10) agree to this by arguing that the National Curriculums do not give enough support and practical solutions for teachers to realize integration in practice. Indeed, the participants who stated to have taught English less than five years claimed that they are in the beginning of their teaching careers and not yet have the resources to add integration into their teaching. Thus, they are mainly concerned in planning and carrying out functional English lessons and they do not have the time to apply themselves into integration and its principles. Atjonen (1990: 83) also notices this by stating that for many unexperienced teachers integration can become too great a burden as it requires resources and profound knowledge on the integrative subjects in order to be meaningful and functional.

Lastly, 6 out of 32 teachers (19%) claimed that technical issues in schools, such as timetables or how the school year is organized into shorter terms. This is also a finding which came up in the study of Lam et al. (2013). The school environment itself with different classes for different subjects and the National Curriculum was argued not to encourage teachers to test integration in practice. In fact, teachers saw that these already mentioned factors make it even harder to conduct integrative entities as

realizing integration involves more arrangements. This relates to the fact that schools are still strongly living up to the tradition of teaching separate subjects. Koppinen and Pasanen (1981: 11) agree by stating that the sharp distinction into different school subjects is the structural hindrance to integration in Finnish schools. Indeed, concerns Norrena (2015: 145) and Atjonen (1992: 37) present are that the traditional way of treating school subjects as separate units will continue as it is, since people involved in education from teachers and administrative official to students' guardians have strong attitudes in favor of distinct school subjects and they are also strongly accustomed to it. A great extent of the realization of integration is, therefore, on the teachers' responsibility and how they interpret learning and teaching according to the National Curriculum of 2014.

(23) T6: Tuntirakenteet, lukujärjestysasiat ja vähäinen suunnitteluaika haittaavat aihekokonaisuuksien toteuttamista yläkoulussa.

How lessons are structured, timetable issues and only little planning time hinder realizing integrative units in the upper grades of comprehensive school.

All in all, the future of integration is still not entirely clear. In general, many teachers are excited about integration and looking forward to start planning integrative units in school as the National Curriculum of 2014 comes into effect. Integration is seen as a method which will be beneficial for students connecting scattered information and making more meaningful study units. However, English teachers are concerned of the planning time integration will take and how much collaboration between teachers is needed. In addition, the technical issues in schools, such as how the schedule is organized and how flexibly the classrooms can be altered according to integration's requirements raises thoughts.

7 CONCLUSION

The aim of this master's thesis was to study which subjects English teachers would or would not prefer to integrate with English. Therefore, a questionnaire was conducted in order to receive a numerical outlook on the general opinions and preferences

teachers have for different subjects when integration is concerned. An additional purpose of the study was to find out what the reasons behind these preferences are. In other words, the object was to explore how teachers motivate their choices for certain subjects being less or more preferred as integration partners. Therefore, the questionnaire also included open-ended questions. All in all, the results of this study answer to the research questions, so using a questionnaire can be seen to function well in this study giving both numerical and qualitative data. It also enabled to elaborate some reasons behind the preferences teachers have for distinct subjects. However, if every teacher of the 49 participants had answered to the open-ended questions in the questionnaire, more reasons would have possibly arisen in addition to the ones presented in sections 6.2.1, 6.2.2, 6.2.3, 6.3 and 6.4. The data, nevertheless, gives some idea of the common themes in teachers' perceptions on integration. However, as the sample was so narrow, it adds weight to single answers, which also does not encourage to make generalizations. This is nevertheless a part of the nature of a qualitative study (Tuomi and Sarajärvi 2009: 74). Nevertheless, the results are indicative, and invite other researchers to conduct a more larger-scale study around the subject.

In all, the study reveals English teachers find the most preferred subjects to integrate with English to be history (65%), geography (63%) and home economics (55%). These subjects were stated to be natural and effortless to combine with English. This naturalness derives from the subjects having suitable vocabulary in addition to the fact that English covers these subjects in the themes and contents. Furthermore, it was discovered that teachers prefer these subjects because they have material available online, which teachers can use in their teaching. In addition, teachers seemed to value those subjects which they personally are interested in or which they teach in addition to English. Thus, teachers' own expertise was a factor shaping the preferences for certain subjects.

When possible integration partners were considered, the answers follow the ones of the most preferred integration partners. Thus, geography and history gathered both 73% of the votes and home economics 62% of the votes. Teachers had rather identical reasoning for these subjects as they had for the question on most preferred subjects. Thus, English was again stated to have common themes with the above-mentioned subjects, which also make them plausible integration partners. However, teachers' own preferences and competence in other subjects as well as social reasons and the attitudes other teachers have for integration were placed more value in this question. Therefore, how well teachers collaborate with each other is also important in the integration process.

Lastly, teachers also answered which subjects they would not prefer to integrate with English. Thus, English teachers would not prefer French (52%), physics (52%) or chemistry (46%) as integration partners. Issues such as the teachers' own knowledge and competence in the above mentioned subjects and the difficult concepts and ideas the subjects bear can be claimed to influence the choices English teachers make when thinking of subjects they would integrate with English. It can also be claimed that teachers are not unanimous in if languages should or should not be integrated with other languages. Most of the teachers thought according to the National Curriculum's principle of trying to link languages together as a desirable aim whereas some teachers were concerned whether teaching languages together is sensible and if it confuses students.

Some of these results were somewhat expected as the background literature also suggested that English text books cover many issues present in history, geography and music as well. However, a slightly unforeseen matter was that physical education did not receive high rankings although there has been a great deal of discussion around adding movement to the school curriculum. Even the new National Curriculum (2014: 27) addresses the matter, but it is still not visible in the results of this study. Another interesting theme was around languages and whether integrating languages, either the mother tongue or foreign languages together, is a valuable idea. Some of the teachers claimed integration not being suitable between two or more languages whereas other were in agreement with the National Curriculum of 2014 and its idea of

making students compare and contrast different languages and adding language awareness.

In fact, there are many underlying issues behind integration. Preferring one subject over another can be related to multiple issues, for example, chemistry with other teachers, teachers' own views and attitudes towards integration which again affect teachers' willingness to use integration in their teaching. However, as the study only concentrates on preferences teachers have, it does not reveal the core of the attitudes towards integration. In other words, it is still to examine which factors result in teachers being or not being willing to integrate in the first place. Some attitudes were, though, visible in this study as a couple of teachers claimed to have doubts on the future of integration suspecting that integration might be nothing but another trend in the field of education. Thus, a large scale study concentrating on the general opinion teachers have on integration is something that could be conducted in order to find out how teachers generally regard integration. In addition, as the National Curriculum of 2014 has come into effect, it would interesting to find out which subjects have become integrated in practice and if those realized integrative units follow the results of this study.

It is interesting to see where integration will settle in the future. Only time will show how integration, and the grounds of the National Curriculum of 2014 will be established in schools. Thus, integration can become a permanent and natural part of everyday life in schools, or it might only be noticed by carrying out one theme day a year. Koppinen and Pasanen (1991: 67-68) predict that integration between subjects establishes itself in schools as teachers adopt a more learner-centered outlook instead of a subject-centered one. This is also related to how teachers see themselves as teachers and what their role in teaching is. However, changes, and especially more fundamental ones, can take a rather long time before integration will become a natural part of organizing education. Therefore, Koppinen and Pasanen (1981: 27) claim that the inner arrangements in schools should create an environment in which collaboration and integration are possible to carry out. Nevertheless, the pressure the

New National Curriculum sets on schools and especially on teachers will likely, and hopefully, result in creative subject combinations and projects across different disciplines engaging students into learning.

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APPENDIX 1 Questionnaire for English teachers



Englannin integraatio muihin oppiaineisiin yläkoulussa

Tervetuloa kyselyyn!

Kysely kestää noin 10-20 minuuttia. Tässä kyselyssä integraatiolla tarkoitetaan joko kahden tai useamman eri aineen tai niihin kuuluvien aihekokonaisuuksien tai teemojen yhdistämistä mielekkääksi kokonaisuudeksi. Integraatiota voidaan muun muassa toteuttaa niin yksittäisillä tunneilla, useamman tunnin suunnitelluissa kokonaisuuksissa kuin teemapäivien aikana.

TAUSTATIEDOT 1. Sukupuoli Mies Nainen Muu 2. Kauanko olet toiminut englanninopettajana? 0-4 vuotta 5-9 vuotta 10-19 vuotta 20-29 vuotta yli 30 vuotta

3. Mitä ainetta tai aineita opetat tällä hetkellä ja mihin aineeseen tai aineisiin sinulla on pätevyys?

	h	tällä netkellä tätä ai-	Minulla on päte vyys tä hän ai- neeseer
Biologia			
Englanti			
Fysiikka			
Historia			
Kemia			
Kotitalous			
Kuvataide			
Käsityö			
Liikunta			
Maantieto			
Matematiikka			
Musiikki			
Opinto-ohjaus			
Ranska			
Ruotsi			
Saksa			
Tekninen työ			
Terveystieto			
Tietotekniikka			
Uskonto			
Yhteiskuntaoppi			
Äidinkieli ja kirjallisuus			
Jokin muu aine			
Jokin muu aine			
Jokin muu aine			

KOKEMUKSET INTEGRAATIOSTA

4. Mihin aineeseen tai aineisiin integroisit mieluiten englantia?
Biologia
Elämänkatsomustieto
☐ Fysiikka
Historia
☐ Kemia
☐ Kotitalous
☐ Kuvataide
☐ Käsityö
Liikunta
Maantieto
☐ Matematiikka
Musiikki
Opinto-ohjaus
Ranska
Ruotsi
Saksa
☐ Tekninen työ
Terveystieto
☐ Tietotekniikka
Uskonto
☐ Yhteiskuntaoppi
Äidinkieli ja kirjallisuus
Jokin muu aine
Jokin muu aine
☐ Jokin muu aine
5. Miksi haluaisit integroida englantia näihin aineisiin?

s. Mihin aineeseen tai aineisiin koet integroinnin olevan mahdollisinta tote täytännössä?	utta
☐ Biologia	
Elämänkatsomustieto	
Fysiikka	
Historia	
☐ Kemia	
Kotitalous	
☐ Kuvataide	
Käsityö	
Liikunta	
Maantieto	
Matematiikka	
Musiikki	
Opinto-ohjaus	
Ranska	
Ruotsi	
Saksa	
Tekninen työ	
Terveystieto	
Tietotekniikka	
Uskonto	
Yhteiskuntaoppi	
Äidinkieli ja kirjallisuus	
Jokin muu aine	
Jokin muu aine	

Jokin muu aine
7. Miksi integrointi toteutuisi todennäköisimmin näiden aineiden kanssa?
8. Oletko integroinut englantia muihin aineisiin tai aihekokonaisuuksiin? Jos olet, niin mihin ja miten? Miten päädyit tekemään yhteistyötä juuri tämän aineen kanssa?
9. Mihin aineeseen tai aineisiin et haluaisi integroida englantia?
Biologia
☐ Elämänkatsomustieto
☐ Fysiikka
Historia
Kemia
Kotitalous
☐ Kuvataide
☐ Käsityö
Liikunta
Maantieto
Matematiikka
Musiikki
Opinto-ohjaus
Ranska
Ruotsi
Saksa
Tekninen työ
Terveystieto
☐ Tietotekniikka

Uskonto		
Yhteiskuntaoppi		
☐ Äidinkieli ja kirjallisuus		
Jokin muu aine		
Jokin muu aine		
Jokin muu aine		
10. Miksi et haluaisi integroida englantia näihin aineisiin?		
11. Jos et ole integroinut englantia muihin aineisiin, minkä syiden koet vaikuttaneen siihen, että integroiminen on jäänyt toteutumatta? Ovatko syy olleet esimerkiksi itsestäsi vai muista tekijöistä riippuvaisia?		
12. Lopuksi voit halutessasi kertoa jotain muita ajatuksia integraatioon liittyen.		