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STUDENTS' MORAL GROWTH DURING AN EDUCATIONAL PROJECT;
A CASE STUDY

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Thesis abstract

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Tiivistelmä/Abstract <p>The aim of the research is to map teacher's observations regarding her students' moral development during a project-based learning module. I am interested in project-based learning and the possibilities it can offer outside of the subject matter. Through my own teaching experiences, I have seen projects offer not only learning results but also joy of learning. In this research I am however focusing on moral development. In the research I aim to bring the teacher's observations to the limelight; what she had noticed during the different phases of the project from planning to evaluation. This research finds out how she purposefully influenced her students' moral, but also what unconscious impacts she had on them.</p> <p>The methodology of this research is case study in the context of a third-grade classroom in the Northern Finland. The research follows the seven steps of Kvale that are built around interview data. With the help of the data I investigate the teacher's experiences of project-based learning and simultaneous moral growth of the students. The data is divided under three research questions which cast light on what moral and value education the teacher wanted to provide for her students, what kind of moral issues spontaneously rose as the project went on, and how the students have demonstrated their moral growth after the project has ended.</p> <p>According to cognitive moral development theory, we need to have a sufficient moral understanding of a certain topic before we can understand the moral aspects of it and that way develop our moral understanding. Project-based learning seems to offer great grounds for moral development as the project starts with the students getting to know their topic with real-life learning situations. Once they possess sufficiently knowledge on subject content matter, the teacher can introduce moral questions and dilemmas to the students to ponder.</p> <p>In project-based learning students work with various individuals and that way cannot avoid encountering different opinions and moral dilemmas that they bring along. These are the real-life learning situations when the moral understanding is challenged and prone to a change. Student working on projects also need to be responsible of their own work. The change in the working methods and co-working skills were noticed by other teachers of the school after the project had finished.</p>			
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Tiivistelmä/Abstract <p>Tutkimuksen tavoitteena on selvittää opettajan havaintoja oppilaiden moraalisesta kehityksestä laaja-alaisen oppimiskokonaisuuden (projektin) aikana. Olen kiinnostunut projektioppimisesta ja sen tarjoamista mahdollisuuksista ainesisältöjen ulkopuolelta, sillä omien opetuskokemusteni kautta olen todennut projektityöskentelyn tuovan sekä oppimisen iloa että oppimistuloksia. Tässä tutkimuksessa kuitenkin keskityn moraalien kehitykseen. Tutkimuksessa pyrin tuomaan esille opettajan näkökulman projektin eri vaiheissa; sen suunnittelussa, kuluissa ja arvioinnissa sekä miten opettaja on tietoisesti ja tiedostamattaan vaikuttanut oppilaiden moraaliseen kehitykseen projektin aikana.</p> <p>Tutkimuksen metodologina on tapaustutkimus, jonka konteksti on pohjoissuomalaisen peruskoulun kolmas luokka. Tutkimus seuraa Kvalen seitsenportaista tutkimusrunkoa, joka rakentuu haastattelumateriaalin ympärille. Aineistona on siis erään opettajan haastattelu, jonka avulla selvitän opettajan kokemuksia projektityöskentelystä ja samanaikaisesta oppilaiden moraalista kasvusta. Analyysivaiheessa haastattelu on jaettu kolmen tutkimuskysymyksen alle, joista selviää, mitä tietoisesti tuotuja moraalien- ja arvokysymyksiä opettaja on uuttanut projektiinsa, millaisten projektin aikana nousseiden moraalisten kysymysten äärellä oppilaat painivat sekä miten oppilaat ovat demonstroineet moraalista kehitystään projektin jo päättyttyä.</p> <p>Kognitiivisen moraalikehityksen mukaan jokaisella tulee olla jonkin tasoisen kognitiivinen ymmärrys aiheesta ennen kuin pystymme siirtymään sen moraalisiin aspekteihin ja siten kehittämään moraaliamme. Projektityöskentely näyttääkin tarjoavan näin hyvät puitteet moraalien kehitykselle, kun oppilaat ensin tutustuvat aiheeseen aitojen elämän ongelmakohtien ympärillä. Kun riittävä kognitiivisen ymmärryksen taso on saavutettu, voidaan siirtyä keskustelemaan aiheen moraalista kysymyksistä.</p> <p>Projektityöskentelyssä oppilaat toimivat yksin sekä eri kokoisissa työryhmissä, jolloin oppilas kohtaa eriäviä mielipiteitä ja joutuu näin selvittämään syntyviä moraalisia ristiriitoja. Nämä tilanteet ovat aitoja kohtaamisia ja oppilaiden moraaliset käsitykset joutuvat kyseenalaistetuksi. Tällaisten moraalisten yhteenottojen ansiosta oppilaiden moraalikäsitys muokkautuu ja kehittyy. Myös omasta työstä vastuun kantaminen on osa projektityöskentelyä ja opettaa oppilaille uusia arvoja ja työtapoja. Myös koulun muut opettajat olivat huomanneet muutoksen oppilaiden vastuuntunnon ja ryhmätyötaitoissa projektin päättyttyä.</p>			
Asiasanat/Keywords arvot, laaja-alainen oppimiskokonaisuus, moraalikasvatus, moraalikehitys, projektioppiminen, tapaustutkimus			

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1 INTRODUCTION

The curriculum development is a hot topic around the world from teacher training to basic education. Many educational institutions are looking for new ways to develop their school days in order to provide better learning results combined with joy of learning. In many cases project-based learning has intrigued many and new project initiatives have seen the daylight that are being marketed for schools (e.g. Buck Institute for Education, 2017; Intel Teach Program, 2012). Also in national level, projects, as a way to combine various subject matters, have become increasingly popular. Finland is one of these countries that sees the potential of project-based learning.

In 2017 Finland adopted a new nationwide core curriculum for basic education which obliges each teacher to carry out at least one project, so called multidisciplinary learning module, during the school year. This module combines different subject areas and the pupils are involved in the planning process of the project. (Opetushallitus, 2016, p. 31-32.) This is the first of a kind, highly ambitious national curriculum that creates new ways of learning in projects for the whole school-age population. There has been plenty of discussion around this topic within the country and has also called the attention of the international papers.

Even if there is a lot of fuzz about project-based learning in today's media and educational publications, it is nothing but a new idea – it dates back to the end of the 19th century and its father, John Dewey (Savery, 2015). Education has simply become more openly discussed topic and the public is more involved in the discussion.

As project-based learning is becoming increasingly popular, the educators should not forget the other dimension of learning. Moral education and the value base should be incorporated in the regular school day no matter what methodology is used – that includes also projects (Hironen, 2008). For the governments as well, it is important that the pupils receive the best possible tools to be moral citizens, taking responsibility of their own actions and continuing the lifelong learning (Finnish National Agency for Education, n.d.). Many teachers do this already by purposefully by creating time and space to talk about values but also spontaneous needs for moral growth rises during school hours. Following the current trends, the key

question is how to combine project-based learning and moral education into a meaningful learning experience. This is a question I have not been able to find any research on, so I took the challenge and combined these two areas into a case study.

The research follows the guidelines of Kvale (Cohen et al, 2007, p. 356-373). It has seven steps and interview is used as a data collection method. The seven Kvale's steps are thematising, designing, interviewing, transcribing, analysing, verifying and reporting and the research report also follows these steps. All the steps are explained in detail in order to guarantee the validity of this research.

2 PROJECT-BASED LEARNING

In this chapter I have put together various scientific articles on project-based learning (PjBL), which will give the main theoretical concept for it. Reading onwards, the reader will see that there is no single formula for a successful project, but there are some outlining generalities for PjBL (Abdulwahed et al., n.d.; de Graaff & Kolmos, 2007). It is good to note that sometimes in pedagogical research, *problem-based learning*, *inquiry-based learning* or *learning by doing* alongside with other umbrella terms are used as synonyms for PjBL (see e.g. Edelson, Gordin & Pea or Intel Teach Program, 2012). Moreover, there are similarities but also differences in various schools of thought and between different terms, so in this paper I have chosen to use only the term project-based learning in order to avoid any confusions.

2.1 History of project-based learning

Project-based learning is nothing but a new idea. There is a long tradition of hands-on activities, field trips and laboratory experiments in basic education (Thomas, 2000, p. 2). Such hands-on education dates back to John Dewey (1859-1952) who is the father of the learning by doing movement and believed that “*education begins with the curiosity of the learner*” (Savery, 2015, p. 11). With his view on education, Dewey then influenced his pupil and later on colleague, Heard Kilpatrick, who today is considered as the originator of the PjBL (Beyer, 1997). In 1918, Kilpatrick published his essay *The Project Method* where he described a *pro-ject* to be “*a hearty purposeful act*” (p. 1). Such an act, according to Kilpatrick, could be for example a dress that a person has planned herself and made herself, with a “*hearty fashion purpose*” (Kilpatrick, 1918, p. 2). That is to say, that the dress presents a meaningful project with a purpose, related to the social surroundings of the participant. What was clear

for Kilpatrick back then was that any project needs to be motivating for the pupils, and those projects need to have a purpose “*present in life*” (Kilpatrick, 1918, p. 2).

It was not until 1960's, that PjBL along with other more experimental methods started to gain place in North American institutions of higher education as an alternative to mass lectures (Graaff & Kolmos (ed.), 2007, p. 1). Within the same decade it then spread over the Atlantic to Europe, where especially in Danish engineering universities it became highly popular – and still is (de Graaff & Kolmos, 2007). In modern pedagogy, more and more teachers are abandoning the traditional ways of teaching and worldwide new methods are being tried out. Today PjBL is used in various universities in different disciplines, in learning centres as well as in basic education. This wide usage tells how flexible and protean PjBL is, but on the other side has brought confusion in its conduct – what exactly is PjBL and what is it not?

2.2 Project-based learning principles

Hanney and Savin-Baden (p. 7, 2012) point out how project-based learning can have different meanings and different practices depending on the country and the discipline area. Even though PjBL is highly versatile and can be easily adjusted to different learning situations, Graaff and Kolmos (2007, p. 7) have stated three main learning principles that form the project-based learning:

- 1) the **learning** approach: a problem as a main motivator, the starting point for the learning process,
- 2) the **contents** approach: interdisciplinary learning, spanning across subject areas and methods, and
- 3) the **social** approach: learning as a social act, learning from each other, sharing knowledge, the ownership of the process at the participants.

Before going into the details, it must be noted that a PjBL project aims at having an impact on the surroundings, knowledge or even on attitude on life. It includes a new, unresolved task and includes some desired changes. According to Algreen-Ussing (Graaff & Kolmos, 2007, p. 4) it requires resources from various sources and across the traditional knowledge, while it has an ending point that must be determined in advance.

The **learning process** starts with a problem, and the project is built around it. This problem is derived from real-life and has a real-world connection, providing motivation for the students and a concrete meaning for the project (Hanney & Savin-Baden, 2012). Larmer and Mergendoller (2015) suggest the challenging problem of the project to be an open-ended driving question. The projects should be important and relevant to the age and the development of the students, but at the same time similar to those of real scientists, musicians or historians. The so-called cookbook recipe rarely works in learning: to follow the step-by-step instructions from a text book requires no deeper material understanding (Krajcik & Blumenfeld, 2006). This type of learning might only result in superficial learning and provide no satisfaction of discovery, whereas PjBL is highly student-centred thriving from their personal interest, connecting the learning to the world they live in. (Krajcik & Blumenfeld, 2006.) Kilpatrick had also observed in his early research, that freedom of choice brought more enthusiasm and further motivated his pupils (Graaff & Kolmos, 2007). (George Lucas Educational Foudation, 2014).

The **contents approach** is in the core of the learning. The projects are not conducted to fill up the extra hours but the whole curriculum is built around it, where the PjBL is the central teaching method (Thomas, 2000, p. 3). PjBL is interdisciplinary, integrating various subject fields into one meaningful entity where the learners integrate and apply the theory and knowledge they already possess. However, if the project fails in providing any degree of difficulty, it becomes more an exercise, not a PjBL project (Thomas, 2000, p. 4). Abdulwahed et al. (n.d.) argue that the specific curricular outcomes could be learned even more efficiently through PjBL than in a traditional classroom setting. Often the project has a concrete end product, such as an animation, a website, an art exhibition, or a report. While the students work on their projects they are most likely to encounter several problems that they need to solve in order to get the desired end product. These problems are the learning moments (Ertmer, 2015, p. 10). (George Lucas Educational Foudation, 2014).

The **social approach** is the collective learning experience the PjBL relies on, it is highly structured collaborative learning method. PjBL is not only learning from each other but the students get to share their knowledge and discuss about the problems as they arise. In PjBL the students are welcome to bring their own backgrounds, experiences, abilities and interests in the project, becoming is suitable for different learners supporting their individual learning styles. (Railsback, 2002) As the project goes on, the students learn to take responsibility for their own learning and finishing the project. In a student-centred learning, the students also become a fixed part of assessment in forms of peer and self-assessments and continuous feedback. It is not only the end product that is being evaluated, but the whole process. (George Lucas Educational Foudation, 2014).

2.3 The role of the student in project-based learning

The most active role in PjBL has the students. They are the problem solvers, decision makers and investigators, they interact with other team members, while practicing various transferable skills, such as conflict solving and team work (Hanney & Savin-Baden, 2012, Intel Teach Programme, 2012). The material available does not provide students with any ready information but they need to be active in finding it themselves. Students ask questions, observe, interact, make connections, discuss and interact. Moreover, they are provided with learning technology that they use in scaffolding, having an access to inquiry activities that are normally beyond their abilities (Krajcik & Blumenfeld, 2006).

As the learners have the control over their own work, they should be able to take the decisions themselves and look for their own path (Mergendoller & Thomas, n.d.). Together within the given timeline, the students determine the final output and plan their work accordingly, learning and practicing skills in an authentic situation. Often in PjBL students also create end products or artefacts for their projects that reflect the reality as closely as possible. (Thomas, 2000.) This way they enhance their understanding of the current project, and they

demonstrate it by making a visible and concrete artefact that can be reviewed by others in the learning community.

The classroom is a research community where the students will also present their findings. This way the other students with work as a critical audience for each other's work, listen and give feedback. Not only they develop the active skills during a project but also they get to practice collaborating, listening, turn-taking, and respecting each other's opinions and input. (Krajcik & Blumenfeld, 2006). Evaluation and feedback is critical in students' development and self-image, so including the students in that process in forms of self-evaluation and peer-evaluation is extremely important (Opetushallitus, 2016, p. 47.)

2.4 The role of the teacher in project-based learning

The teacher's role and in fact the whole mind-set need to change when moving to project-based learning. The literature speaks about facilitators, tutors and instructors instead of teachers (Harmer, 2014, p. 21), and on challenges on assuming a role of the "*guide rather than a dispenser of information with all the answers*" (Green, 1998, p. 13). Harmer (2014, p. 21) refers to Blumenfeld et al. (1994), who had found that many teachers considered PjBL more as a new style of teaching, not as a pedagogical approach. This according to Blumenfeld et al. (1991, in Thomas, 2000, p. 2) was the mistake made in previous attempts to incorporate more hands-on curricula, alongside with insufficient attention given for the students' ideas.

PjBL projects have a high degree of unpredictable paths to achieve an unpredictable outcome. The projects include student autonomy and free choice, worktime that cannot be always supervised including homework, and gives a lot of responsibility for the students themselves. The teacher needs to provide space, time and tools for the students to work relatively independently and autonomously with their project but also help the students in finding their own strategies for problem solving. The teacher, or *tutor*, is questioning the students'

choices, asks for justifications, and provides expert guidance and feedback (Ertmer, 2015, p. 10). The students should be allowed to take decisions regarding their project themselves but together with the teacher they can discuss which path to take. The teacher is encouraged to breakdown and scaffold the instructions, depending on the learner. (Thomas, 2000.)

Sometimes the projects can go off-track with unwanted outcomes. This is why Thomas (2000, p. 29) is inviting teachers to plan the project carefully, perhaps even adding specific requirements for the output of the project. Before assigning a project for the students, the teacher need to have the problem, the assignment, the group compositions, and the assessment clear (McKay, Gradel & Scott, 2013). Teachers need to keep carefully in mind what they are planning to achieve with each project phase and how each of them reflect the curriculum. What makes this problematic is the fact that there is still very little material available for the teachers to use, versus the traditional teaching style books filled with print-out exercise pages and exams. PjBL instructors need to create their own material and search for guidance and support. (Thomas, 2000.)

Conducting PjBL projects is also beneficial for teacher, above all having a new point of view on your profession and experiencing the joy of learning. The projects are at their best when teachers of various disciplines collaborate, enforcing the cooperation within the professionals. Also, the teacher-student relationship evolves and can become closer as the classroom hierarchy disappears. (Intel Teach Program, 2012.) The teacher is not the only evaluator of the work but it is done together and continuously with the students, guiding their work towards the right direction. Mistakes and wrong decisions are also part of the learning and growing process. (Opetushallitus, 2016, p. 47.) Through his own experience as a PjBL instructor, Green (1998) emphasises how the teacher needs to create a safe and comfortable classroom environment, and only then can the real issues of importance be seen. The teacher needs to be active member in the classroom but at the same time take the backseat in the learning process. "*Students are experts in their own reality; the biggest challenge is letting them guide you through it*", he concludes (p. 15).

Without the school administration's support, conducting PjBL can be challenging. The administration needs to give time and space for the projects (e.g. block schedules instead of subject specific schedules) and invest in visitors and special learning materials, and stand behind the teacher's decisions and even let them fail. (Intel Teach Program, 2012.) PjBL

instructor needs practicing and training, and not every project can be a success. Larmer and Mergendoller (2015) are concerned that many teachers are trying it out unprepared and without a clear vision, and that is when the problems and negative attitudes will add up. Project-based learning is easily adaptable method and can be adjusted to the age and development level of the learners and the projects can be personalised to meet the needs of an individual learner and the school curriculum – but with the support of the whole learning community. There are some indirect research findings that effectiveness of PjBL could be enhanced with it is incorporated in the whole school action plan (Thomas, 2000, p. 37).

2.5 Advantages of project-based learning

In a literature review of 59 articles on PjBL, there was found a high consensus between PjBL researchers on the skills that PjBL develops. Most mentions were about team collaboration, problem solving skills, and both oral and written communication skills. (Harmer, 2014, p. 12) High motivation was often reported, according to Harmer (2014, p. 13-14) in academic research findings such as in student interviews but also through teachers' observations. There is research evidence that complex skills such as decision making and planning can be effectively taught with PjBL (Thomas, 2000, p. 37).

Through meaningful learning situations, PjBL engages students more to school, cutting the absenteeism and boosting cooperative social skills, but also improves the academic performance (Intel Teach Programme, 2012). Teachers using PjBL have reported increased student attendance and improved attitudes towards school (Thomas, 2000, p. 36). For Green (1998, p. 16), using PjBL had helped him in teaching skills and attributes that cannot be measured by any tests or exams but last for a lifetime.

PjBL is more about learning to learn: students have connections to the outside world of the classroom, they keep a journal, build a portfolio and practice their craftsmanship (Thomas, 2000, p. 5). Green (1998) tried out a PjBL with a group of adult learners aiming to pass their

G.E.D tests (academic test, equivalent to North American high school level), and observed for a first time a group of enthusiastic students who engaged not only learning for the official tests but who committed plenty of time to have a real impact on their own society. In the end, his students learned English grammar, essay writing skills, mathematics and other skills that are put on a test on the G.E.D., just by taking part in the project. Above that, the participants reported to have a rise in their self-esteem, sense of community, and joy of learning.

Project-based learning is a subject to evolve, and new movements have already merged from it, such as the Task Project, the Discipline Project or the Problem Project, which vary in the degrees of the students' self-direction and are designed to facilitate the specific study programme requirements of higher degrees. Graaff and Kolmos (2007) find the richness in the various PjBL formats and in their flexibility. It is easy to take the PjBL principles and start formatting your own, one that fits the space, time and the purpose (p. 5-7).

2.6 Project-based learning in the Finnish Curriculum

As 1st of August 2016, Finland adopted a new nationwide curriculum for basic education (Finnish National Agency for Education, n.d.). It brought many changes to the regular school day; one of the most discussed being the introduction of projects or so called multidisciplinary learning modules, to each classroom. This even caught the attention of the media worldwide for example by the media houses like The Independent or The Washington Post and was sometimes falsely reported as abolishment of subjects (Garner, 2015; Ehrenfreund, 2015). The curriculum gives the right to every student to participate at least in one long-term project during each school year. (Opetushallitus, 2016, p. 31-32.)

The Finnish National Agency for Education (Opetushallitus, 2016) sees working in projects as an efficient way to unite various subjects under one topic. It is anticipated that through projects the students will get better understanding of the interconnectedness between subject matters and how everything is related to each other. PjBL does not happen in separate time

or subject slots but the phenomena and topics are operated as units. The topics are inspired by the local surroundings and current events but also highly derived from the lives and worlds of the students reflecting their age and interests. (Opetushallitus, 2016, p. 31-32.)

The multidisciplinary learning modules are aimed to expand the world view of the students by reflecting the values of the national and school curricula. Students are expected to work as a community and to build the knowledge together, taking the responsibility of their own learning and doing. Learning methods are inquiry based and the students are already taken on board to in the planning phase. One of the aims of the multidisciplinary learning modules is to create a connection between school and the rest of the community, e.g. work places bringing the experts and real-life situations into the learning process. Students get feedback throughout the whole project and not only at the end of it. Moreover, the feedback is focused on their ways of working and not on the end product or the personality of the student. (Opetushallitus, 2016, p. 31-32.)

3 MORAL DEVELOPMENT

“It may just be that moral development is bigger, messier, and more complicated than most investigators have wanted to think.”

(Campbell. & Christopher, 1996, p. 20)

What is it that pushes us to act morally? Why do we want to do and be good? Why do we sometimes break the law? There are countless moral development theories available which resonates with the wide interest we humans over time have had towards philosophy and human nature. It is often thought that moral issues are theoretical dilemmas to be resolved, but actually they are evident in our everyday lives, even in the most minor interactions. In fact, all personal decisions that potentially influence someone else, are moral dilemmas. (Endicotta, Bock & Narvaez, 2003.)

In this chapter I am defining the moral and the moral development theory used in this paper. We will start by defining what the moral is and look into the huge variety of various moral development theories available. I will then define the concept of cognitive moral development and Kohlberg’s theory on moral development in detail. The last part is dedicated to the factors that influence moral development, social and emotional learning, and moral education.

Ethics and moral are two distinct terms that sometimes are used interchangeably as synonyms, as they are in this thesis. The moral and moral education are seen as an umbrella terms that also cover ethics and education for ethics under them.

3.1 The moral as our internal compass

Moral is one of the most essential factors guiding our actions and thought processes, our own principles. It could be referred to an internal compass, guiding us what is right or wrong and what is good or bad. The term itself originates from Latin word *mos*, meaning custom, describing well the internal habit and the usual behaviour the moral coordinates. (Diften, n.d.) We express our morals by commands and orders, the way we justify our own behaviour, and how we act in certain situations. Even though some theorists like Kohlberg have found universalisms in morals, they are highly culture-bound. (Fleming, 2005; Virkkala, 1998.)

The Oxford dictionary (n.d.) defines a moral person to be someone “*concerned with the principles of right and wrong behaviour*” and “*holding or manifesting high principles of proper conduct*”. What these principles are, differ from one theorist to another. For Piaget, for example, the moral principle is a set of rules, and the individual understanding of these rules that makes him or her moral. Kohlberg then brought more philosophical understanding to Piaget’s view: he was not interested what is good or what is bad, but how we reason our choices. For him it was more about the sense of justice. Carol Gilligan, on the other hand, highlighted the morality of care and compassion to contrast the moralities of justice and rules. (Fleming, 2005; Virkkala, 1998.) In general, when we follow our moral rules, we often feel positive feelings. Whereas acting against our morality we can experience bad feelings and guilt. These can be referred as behaving well or behaving bad. (Shavell, 2002)

It is possible to develop our morals: it is considered to be growing beyond the superficial egocentric way of thinking and learning to take into account other perspectives. During moral development our moral understanding and moral judgement are developing, influencing more and more our moral actions. (Gibbs, 2003, p. 8.) Some (e.g. Hiironen, 2008, p. 24) see this moral development as a key to academic success, making it the so called hot potato in education. In the next chapter I will shortly introduce some western moral development theories that are widely discussed in any moral development research available.

3.2 Wide range of moral development theories

There exists a countless number of moral development theories first ones dating back to the Antiquity. There are views from each school of thought and between. Western moral theorists have often seen the child from top-down, someone to be educated by the adults, “*changing animal nature into human nature*” as Kant once said (cited in Wall, 2010, p. 18). Already Plato was concerned about the moral development of the children, and he saw them as educative objects in “*need of rigorous ethical training*” (Wall, 2010, p. 15). Usually moral education is in the very centre of these theories and it is considered to bring discipline over instincts, something that is seen necessary to create moral societies. For example, for Calvin moral education was to bring hope for a better moral world, and for Plato an opportunity for a rational and just society that would be impossible to achieve without rigorous moral training. (Wall, 2010, p. 15-18.)

If these top-down theorists like Plato see the children as wild, dehumanised creatures who need strict moral education to act like human beings, the bottom-up theorists see the original goodness of the people already evident in the childhood. Rousseau is perhaps the most well-known moral theorist of this kind, and to him the children are free and pure, not yet corrupted by the adulthood and surrounding the society: the child “*can do nothing morally wrong, nothing that deserves either punishment or reprimand*” (Rousseau, 1969, cited in Alt & Reingold, 2012, p. 1). Adults, teachers among them, were expected to refrain from transferring any values or norms, and to pursue the well-being of the children. For Rousseau, the role of moral education was to nurture the self-esteem and to stop the self-esteem from turning into pride. (Alt & Reingold, 2012; Wall, 2010, p. 20-22.)

Horizontal theorists are those who do not see the so called inner animal, neither the born-with goodness of the children. They see a child with inherently developing, progressive social features that develop through rational dialogues. Aristotle called children social animals full of potential but not yet in full: according to him, when we are born we start our social

development process that only reaches the maximum potential in maturity. Also for other horizontalists like Locke and Erasmus, the role of education was not to impose certain values but to help each child to reach their own moral and rational potential. John Stuart Mill then has taken this horizontal argument and formed it into a call on universal education. (Wall, 2010, p. 25-28.)

Various moral theories have been discussed since the Antiquity until today, with as many theories as there are theorists. In this paper I have chosen to use the cognitive moral development theory. Piaget was the one to laid ground for cognitive moral development theory which was then taken and further developed by Kohlberg, perhaps the most cited moral theorist in the current literature. In the next chapter the reader gets a closer, more detailed look into this theory.

3.3 Cognitive moral development theory

"Morality is the logic of action just as logic is the morality of thought."

(Piaget, 1932/1965, p. 398, cited in Gibbs, 2003, p. 37.)

Jean Piaget was the visionary cognitive developmental theorist. For him, a mature moral person has rationality inherent in all social relations. When we use this rationality and our ability to reason, we start to take the perspectives of other people. To reach the full moral potential we need to develop it, which for Piaget happened in three consecutive stages. The moral develops from a stage of aiming at gaining future favors to actually starting to cultivate relationships of mutual care. (Gibbs, 2003, p. 16-42.)

According to the cognitive theory, how we understand the world is how we see the world. Having said that, it is only natural that the moral development is then seen to happen in line with the cognitive development; the understanding of the right develops simultaneously as we get to understand the world. In order to behave in the right way, we start to understand that we need to have an explicit level of moral judgement. In other words, to react to a certain moral situation, we need to have some cognitive understanding of that specific situation. (DiMasi, 2012.)

The moral development will not happen just by growing up but we need active training in both cognitive and moral areas (DiMasi, 2012.) In cognitive moral development morality is generally seen as the right thing to do in accordance with the rules and the sense of justice. The development of that morality hereby refers to the moral judgement of the right and wrong and how we develop our perceptions. That is to say how we evaluate and justify the right. (Gibbs, 2003, p. 16-17.)

For Piaget, the authorities such as teachers should not give already generated answers to moral dilemmas but to discuss and compare different options with their students (Suhonen, 2012, p. 26). Children are seen to have an active role in their own development, also when it comes to morality (Fleming, 2005, p. 21.) In other words, morality cannot be given to anyone but the person needs to play an active part in it himself.

Even though Piaget was the groundbreaking theorist in cognitive moral development, Kohlberg, the admirer of Piaget, is perhaps the most influential cognitive theorist up to date. In the next chapter I will look closer into his theory on moral development that has many joint references with the one of Piaget's.

3.4 Kohlberg's moral development theory

Perhaps the most cited moral development theorist in current literature is the American psychologist Lawrence Kohlberg (Wall 2010, p. 57). He was a huge admirer of Piaget's work. Using similar storytelling techniques to present moral dilemmas as Piaget did, Kohlberg developed his moral development theory as his doctoral dissertation in 1958 at the University of Chicago. This started his lifelong research work in the field of cognitive moral development. (McMahon, 2000.) Kohlberg saw moral behaviour to be a direct consequence of moral judgement, which had to be developed through a conscious process (DiMasi, 2012).

For this conscious process, Kohlberg created three moral levels, each divided into two stages. According to him, the moral reasoning develops and the moving upwards in the stages happens while we grow older, hand in hand with our cognitive development. One stage and level sets the pave towards the next stage. The exposure to moral dilemmas and conflicts boosts our moral reasoning as new moral scenarios are unfit with the cognitive schemas we currently possess: when we accommodate new moral solutions, we also upgrade the cognitive level of our moral reasoning and hereby are able to take a step forward – never backward – in the moral development stages. In the root of any moral issues lays the ideas of justice and fairness. (McBride-Pluskwik & Megat Hamari, 2014.)

In Kohlberg's first pre-conventional level, the moral action depends on the estimated consequence from the outside: will I be rewarded or will I be punished? The rules of the society are not yet understood, and taking a perspective different of your own is not possible. Slowly the child starts to understand reciprocity, or so called social exchange mechanism of the tit-for-tat rule: if I scratch your back, you will scratch my back. The child is seeking for satisfaction for they own needs, there are no traces of loyalty or justice in their actions. (Fleming, 2005, p. 8, Kohlberg, 1985.)

When the child has moved on to the Kohlberg's second conventional level, they will first act 'nicely' to please the others and to gain their acceptance. Little by little the child starts to understand the social rules and expectations; what is right or wrong in my society. The rules have been socialised into the child by parents and other educators present in the life of the child. Through his or her actions, the child wishes to gain social approval from the other children, but also understands the social duty of obeying the rules. The child feels loyal to his groups like the family and friends, and wants to live up to the expectations, be a good human being in the eyes of the others. (Fleming, 2005, p. 8-9, McMahon, 2000, p. 8, Kohlberg, 1985.)

The highest, third post-conventional level is the hardest to reach – even for many adults. In this level the societal standards give space for personal principles. The person in this level understands that rules are made for the benefit of all citizens and any unjust rules should be changed. Laws do not embody the absolute right and wrong: what might be right thing to do, could in some circumstance break the rules. Here the personal ethical values and principles take over the law and order. As the moral process is highly internal, the person will be less influenced by the external impact. (Fleming, 2005, p. 9, McMahon, 2000, p. 9, Kohlberg, 1985.)

These three levels, starting from egocentric ideas of obeying the authority in order to avoid punishment or to receive a reward, to fulfilling societal expectations and gaining approval from the peers, all the way to universalising the moral reason, can be found in people with different ages (Wall, 2010, p. 80). None of them strictly corresponds with a certain age group; the same classroom can represent various moral development stages, depending on the cognitive levels of the pupils. The cognitive level is required in order to understand the moral nature of certain dilemmas (Virkkala, 1998, p. 12).

Especially the critics of Kohlberg have highlighted how there is no empirical evidence that moral judgement would automatically be translated to moral action (DiMasi, 2012; Thorkildsen, 2012). Kohlberg also took that under consideration but was ready to predict that it “*is not that people in a moral situation will do what they said they should do outside that situation but that maturity of moral thought should predict to maturity of moral action*” (Kohlberg, 1981, cited in McMahon, 2000, p. 12). Kohlberg then assumes that the action will follow the judgement. DiMasi (2012) has pointed out how humans can be driven by situational, unconscious motives when taking decisions. A person might have high moral thinking and knowledge on how he should behave in a certain situation, but for one reason or another might not follow that reasoning. Thorkildsen (2013) stresses how motivation for morality is the key action trigger, without it there would be no action.

How do we then reach new moral development levels? What triggers the change in us? How can teachers consciously influence the moral development of the pupils? In the next part we will take a look in the factors influencing the moral development and how to integrate them in our schools.

3.5 Factors influencing the moral development

Nobody is the original source of their inner moral beliefs, we are not born with them. Our moral thinking is influenced by the community and the time we live in, just like they influence our language, culture, history and science. We simply join the conversations and pick up from where they previously left, reshaping the ideas over and over again. The input we personally make, is the reconstruction and interpretation of our own meanings, relations and reasoning. (Wall, 2010, p. 169.)

We are constantly reshaping and modifying the schemas we have. Once we have learned a new schema, it still keeps evolving as we get new experiences. However, these schemas are interwoven with our identity helping us to identify with other people and having the sense of belonging. Often these identity factors and new experiences bound to change our schemas actually develop conflicts within ourselves and within groups of people possessing different sets of schemas and experiences. (Endicotta et al., 2003.) To acquire new schemas and to develop those that we already have, we often need to bump into predicaments that cannot be fully explained with the existing schemas. Such confrontations develop our thinking mechanism pushing us to think in more complex ways. According to Endicotta et al. (2003), for instance multicultural encounters often can trigger such processes.

Nodding (1984) writes about caring and moral education and points out how every student should have experiences outside the subject matters; meeting the subject without any previously stated objectives. This means all those real-life situations we encounter without no expectations or evaluations. According to her such learning situations carry two types of values; the instrumental value of profound engagement to own learning, and the consummator value attached to the joy of learning. She also completely rejects the idea of school as a knowledge giver and home or church as moral trainers. She believes the primary aim of every educational institution is to enhance the caregiving. For her, the teacher must live this caregiving, be the example for the students on how to care. The teacher is not there just to

teach the subject matter but to engage the students in acts of caring, enhancing the moral side of the education.

Piaget saw the peer interaction to be the crucial vehicle in the construction of the morality and in the perspective taking. Similar outcomes have been achieved also by other researchers (e.g. Kegan and Kohlberg). However, it must be pointed out that to stimulate the moral development, the constructive peer interaction should happen in an open atmosphere – often amongst good friends. For the construction of such an environment the teacher will play a key role in. (Gibbs, 2003, p. 34-36.) Kohlberg (1985) was convinced that moral discussion e.g. in the classroom setting influences highly the moral stages the children are in.

There are some factors, such as the social class, culture, sex and race, which might influence the moral development. This is simply because such factors affect the opportunities the society provides for the child to practice perspective-taking, and hereby challenge and develop the moral. (Gibbs, 2003, p. 60.) Practitioners of education should be aware of this and foresee the gap in basic education.

3.6 Moral education in basic education

In the previous chapters we have talked about various moral development theories, and defined moral and morality. In this chapter we will look how moral education looks like in the school environment. Is it possible to teach moral in basic education? How can the students develop their morals during a school day? What is the teacher's role in all this? We will take a look in the Finnish Core Curriculum of Basic Education (2016) and in an American moral education programme called SEL, Social and Emotional Learning. These two are the most familiar to me through my Finnish background and my current work in an international school with an American common core.

3.6.1 Curriculum's role

The surrounding world's values influence what happens in our classrooms, and are first and foremost reflected in the local and national curriculums that guide the teachers' work. Curriculums are highly value based and the local vision on education and the purpose of education shines through them. However, it is impossible to list all those prevalent values and implement them in specific ways in the everyday school culture so the creators of the curriculums have had to choose only the most important ones. (Suhonen, 2012.)

Schools socialise the new students to the norms and values of the society, into an independent citizen capable to act morally in the world. Suhonen (2012, p. 11) imposes an interesting question on whether the school as an institution should transfer those values or rather to stay in the background, letting the students create their very own value base. However, one needs certain values in order to function smoothly in the society, and the society needs citizens with certain shared values in order to function smoothly. Schools are then balancing on this fine line of societal obligations and personal understanding of good life. (Suhonen, 2012.)

3.6.1.1 Finnish Core Curriculum

In Finland the underlining values of the common core curriculum are decided on national level and is influenced by the Universal Human Rights and the Convention on the Rights of the Child (Opetushallitus, 2016). The Finnish Core Curriculum is then built on that shared

national value base and on the same idea of what learning is, and these ideas are expected to be visible in all schools around the country (p. 14). The whole purpose of the national curriculum is to improve the equality, equity and justice in the society, and to provide students with the skills they need to possess in order to continue in the path they have chosen (p. 18). There is a common value base the Finnish basic education is built on, and is comprised of the following four sets:

- 1) the student's uniqueness and the right to good education,
- 2) humanity, education, equality and democracy,
- 3) cultural plurality as richness, and
- 4) the need for sustainable lifestyle.

The schools can choose locally how to carry out and evaluate the moral education of these values, and they are free to add their own local values to it. The schools need to demonstrate these values and are encouraged to discuss virtues related to them together with the students. (p. 15-16)

There are subjects of ethics and religion providing platform and an allocated time slot to discuss these matters each week. But as the whole curriculum is built on values, the moral education is more an interdisciplinary cross curricular theme than a specific subject area.

3.6.1.2 Social and Emotional Learning

Social and emotional learning (SEL) is a term developed in the mid-1990's and aims at incorporating emotional intelligence skills such as self-awareness, self-management, empathy, perspective taking, and cooperation into school curriculums. Research has shown that those who possess better social and emotional skills have chances for better academic success; such skills are linked with cognitive development, and increased desire to learn. (Zins, J. E. (Ed.), 2004, p. vii-viii)

SEL aims at students organising themselves in social and emotional ways that help them to carry their academic work with success. In a SEL classroom the students learn from each other not only academic material but also negotiation and conflict resolution. The pupils are to become knowledgeable, responsible, and caring citizens. A SEL school then should create opportunities for the pupils to have dialogues and reflect, while learning “*in the real world*”. Students should be the knowledge producers and users, making the subject content matter less valuable than the skills used during the learning process; communicating with the others, finding relevant information, being co-learners with the peers and teachers involved, and going beyond the school walls. (Zins, J. E. (Ed.), 2004, p. 7-26)

Since the introduction of SEL, many schools in the United States as well as internationally have adopted it in their daily curriculums but in practice they have often ended up being fragmented programs for different themes e.g. health promotion or road safety. (Zins (Ed.), 2004, p. 5)

3.6.2 School's role

Sometimes schools are obliged to follow a specific national moral education programme and at times schools are free to choose what programme they wish to adopt. In any case, as the students spend many hours every week in the school premises it is obvious how big of an influencer school can be. But how should the moral education then look like? As argued earlier, role-taking is fundamental in moral development. Therefore, we need to offer our pupils various opportunities for that. Participation in different types of groups and providing social perspective-taking opportunities should enhance the development – how specific the influence is nonetheless unsure. (Gibbs, 2003, p. 44-47)

There are various moral education programmes like SEL adopted around the world while new ones emerge. These programmes can be seen influencing the moral growth, expanding

the students' horizons. In many of these programmes learning is not taking place in specific separate moral education classes but is rather seen as a lifelong learning process; how we reshape our world to accommodate others as well as ourselves while we evolve. In fact, the moral growth is not exclusive for children but is for human beings of all ages. This is something we adults tend to forget too often – childhood is seen as a pathway to adulthood, to completeness. (Wall, 2010.)

McBride-Pluskwik and Megat Hamari (2014) suggest project-based learning as a tool for moral education: team members are engaged in discussions on the current issues, and build the knowledge in order to resolve them. As exchanging and debating different viewpoints the pupils learn to resolve ethical issues and weight the impact of their actions. They refer to studies (Bielby et al.) that show how the quality overwrites the quantity: the amount of moral education does not have much of an influence, where as the cognitive depth moral education shows improvement in moral thinking.

What kind of stimulus for moral development should we offer for the pupils? Findings of Kegan (1982, p. 46-51) show that an approach of fairness can in fact accelerate the abusive behaviour (*“he hit Marty so it is OK if Marty hits him back”*) whereas the ideal reciprocity could restrain from the abuse (*“he hit Marty, Marty must feel horrible”*). Therefore, it would be necessary to integrate the idea of reciprocity in various subjects in formal education. In the same line of thought is Wall (2010, p. 101) who sees moral reproduction as giving birth to something with a shared new meaning. It is not simply give-and-take based actions where is given exactly what I received, but obeys the golden rule of *“as you would have them do to you”*. For Wall, this is the table turner, the practice of unlacing my own shoes and then putting myself in their shoes. This way we can understand what is expected from us and what we owe to the others. (p. 107)

People have the inner need to believe in a just world, including children. They want to live in a world where what one gets is deserved, be it good or bad. Lerner and Simmons made experiments about the just world theory in the 60's demonstrating that when the participant or the observer feels that he can influence the situation, they are ready to take action and help the victim of the injustice. On the other hand, if the observers were left powerless, they started to justify the injustice and blame the victim. This is the way to avoid the observed injustice to collide with their view on a just world. Schools can influence this by giving the

tools for the students to deal with the injustices they get to know. Also, the students can be invited to develop more complex thinking and to see beyond the just world view. (Baumert, Rothmund, Thomas, Gollwitzer & Schmitt, 2013)

DiMasi (2012) sees the competence of evaluating the validity of our arguments and developing complex thought processes as part of moral education. Both should occur in three dimensions: critically, creatively and caringly. According to him it is not enough to be able to construct arguments, but the evaluation of them is necessary. Through moral education we should learn to let go of our egocentric ideas and move towards more general, collectivist idea. All those three dimensions of criticism, creativity and care should be evident in the classroom in order to achieve an atmosphere where the construction of a dialogue and consensus can take place. In a democratic classroom the pupils can challenge the stereotypes, develop the social skills, and express fostering and caring for the classmates. A school in general should be a place to reduce inequalities and empower the youth through involvement in democratic, collective and moral actions. (Schwabsky, 2012; Pnevmatikos & Papadopoulou, 2012.)

There are many ways available to incorporate moral education into every day school environment. Thorkildsen (2013) sees moral education with a potential to evolve into an anywhere-anytime process. The learning would happen in multifaceted ways: by imitation, direct instruction and collaborative activities. As new problems arise the pupils have the time and space to think about it. Philosophical discussion is also seen to develop the complex thinking processes: it opens doors for feelings, emotions and desires. (DiMasi, 2012.) Mortari and Mazzoni (2012) have used games and stories to engage children in ethical reflection activities, continued with discussions and activities to put ethical virtues in action. In the end it comes down to the ability and skills of the teacher to engage the students into rigorous moral discussion.

3.6.3 Teacher's role

Since the Antiquity, teachers are usually considered to be moral educators and expected to behave as a moral example at their jobs. Educational institutions are then to emphasise the correct democratic values including good behaviour and respect, which the teachers should have as their inner virtues. Teachers are expected to intervene in conflict situations as they arise, and to actively bring up moral questions in the classroom, as well as play the part of the moral role model. (Klaassen, 2012, Alt & Reingold, 2012.)

There are some professional ethical rules and guidelines also for teachers. They can be seen as a tool guiding the work, as the teacher's profession is full of human contact, making it highly ethical profession requiring moral actions. For example the Trade Union of Education in Finland OAJ has created their code of ethics for Finnish teachers that are built on values of human dignity, truthfulness, justice, and responsibility and freedom (OAJ, n.d.a). In January 2017, the Trade Union of Education in Finland introduced the teachers' vow, so called Vow of Comenius. The vow is similar to those engineers and doctors have, emphasising the humane side of the profession and the professional morale. (OAJ, n.d.b.)

Teacher's role as a moral educator is not as immediate as the parents' role. Teacher is bound to the limits of the curriculums and professionalism, he is the presentative of the school as an institution. (Suhonen, 2012, p. 12.) But no matter how well the teacher is following the appointed curriculum, there is always a hidden curriculum introduced by the teacher; the teacher brings his own morals, values, attitudes and interests to the classroom. Teachers should be aware of this in order to control their professional self. (Suhonen, 2012, p. 15-16.)

John Wall (2010) wants to emphasise with his book *Ethics in the Light of Childhood* that too often we adults consider ethical thinking too much in an adult-centred way (p. 169). When bringing up moral dilemmas the adult should not underestimate the capabilities of the children to talk about moral issues as they are "*as complex and diverse as those of adults*" (Wall, 2010, p. 169). Virkkala (1998) also points out that children can have various different moral dimensions, depending on the object of interest and they are not bound to their respective age. The teacher should know his or her students well enough to be able to understand their various stands. The teacher should not impose his own values but there should be place for an exchange of other virtues in the classroom, the space to see the "*moral good in the other*" (Klaasen, 2012, p. 17).

Mortari and Mazzoni (2012) as well as Wall (2010) are demanding researchers and educators to take the children's understanding into account. Childhood is not just a separate pathway towards morality and adulthood but already the smallest children have their own understanding of rules and virtues. It is valuable source for the adults who work with them that should not be overlooked. The adults should trust the children and their capacity to assess what matters for them. Mortari and Mazzoni (2012, p. 109) refer to Dewey's principle of not wasting the children's time: we should engage them only in activities that are useful to their growth.

4 RESEARCH METHODS

*“Sometimes we simply have to keep our eyes open
and look carefully at individual cases—not in the hope of proving anything,
but rather in the hope of learning something!”*

(Hans Eysenck, 1976, p. 9, cited in Flyvbjerg, 2006, p. 224)

In this chapter I will go through the reasons behind this research, the need for this research as well as the practical basis of the conduct of this research; how the research was carried out and how the data was obtained. Later on, I will explain how the data was analysed. However, I believe it is important to start with the motives behind the research as well as with my philosophical stance as a researcher. They are the guiding powers behind this research and the reason why this master thesis even exists.

4.1 The aim of the research and the research questions

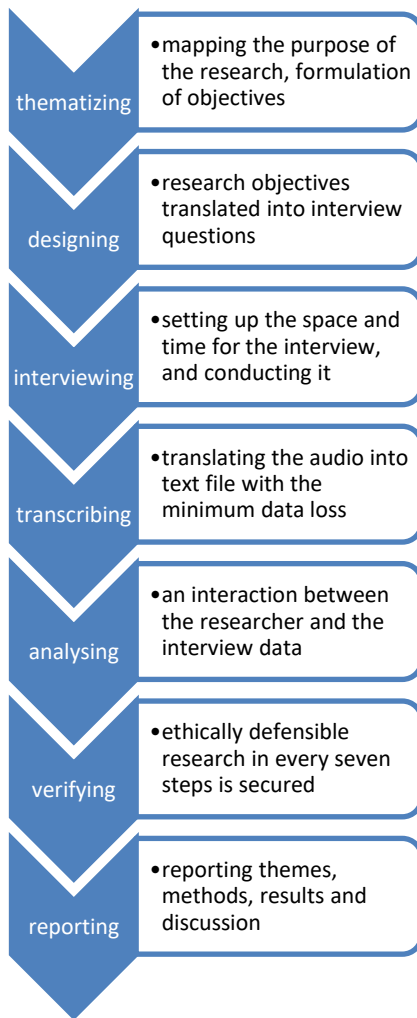
This research aims to investigate how project-based education can influence the moral development of the students, and how the teacher has observed this change in the student body. The interest rose from my personal interests as an educator, seeing how my students have enjoyed working in projects but also from my personal need to understand how the morals of the students can be influenced. There is plenty of research available on project-based

learning as well as moral development but while writing this research I did not come across any research combining these two areas.

The research questions are:

- **In what ways can an educational project aim to influence the moral of the students?**
- **How the students demonstrated (the development of) their moral understanding during the project?**
- **What changes has the teacher observed in his students after the project?**

I aim to answer these research questions through a single case study. The purpose of this research is not to generalise the connection between project-based learning and moral development but to look into a single case that functions as an example, tells us a story; it gives insight of the possibilities that a project can offer for moral development. The data is collected through a thematic interview with an experienced Finnish primary school teacher who has conducted PjBL projects in her classroom. The research was planned according to Kvale's (in Cohen et al, 2007, p. 356-373) seven steps of conducting interview-based research. The Kvale's structure and order is the following:



In the following parts I will explain all the seven steps more closely in their relation to this research. But before, I will explain the reader my philosophical stand that has guided this research journey since the beginning till the end.

4.2 Philosophical underpinnings

I feel I need to explain my epistemological stance here in order to justify the chosen methodology. The researcher's epistemology, the view on the origin of our knowledge or "*how we come to understand or know*" (Wilson, 1996, p. 135), will naturally influence the research and the methodology, in fact it will influence the whole research process starting from the selection of the research question. (Yazan, 2005, p. 136-138.) As a novice researcher I don't have much experience in educational research. However, I do have my views and my positions and as a starting researcher I will need to be aware of them.

I consider myself constructivist. I see that the knowledge we produce is constructed through encounters and other social practices. The reality we perceive is to a great extent in our own minds that we ourselves have constructed, and we have the active role in that. (Lauckner, Paterson & Krupa, 2012) The constructivist pedagogy also argues that the learners personally create their own knowledge and the meaning of the world, reflecting on their own experiences and their past. This means that we search for tools that would help us to make sense of our experiences and, moreover, the world. If we come across for example a new confusing phenomenon or an object, we try to explain it by reflecting our previous experiences and the knowledge we already possess. Sometimes in this knowledge construction process we need to look for new explanations and new set of rules, which are the constructivist learning situations. (Brooks & Brooks, 1999, p. 4.)

With the constructivist paradigm, the research will try to understand how the participants construct their understanding of the researched topic. In this study then, me as a researcher aim to understand the construction of the moral through PjBL. Other researchers such as Yazin, Merriam and Stake take a constructivist approach and argue case study to be the methodology to study the constructions of other people (Yazin, 2005, p. 137-138.) In the case study the participant has the time and space to tell closely his history and allows the researcher collaborate closely with the participant. This way the researcher can get an understanding of the reality and the perspective of the participant. (Baxter & Jack, 2008, p. 545.)

4.3 Case study – study of a single unit

This research is a case study of a project-based learning project. Case studies are widely used in qualitative research and is one of the most frequent in educational research. However, there has been a lot of debate on the validity of case studies as well as the correct design of it. According to Yazan (2015, p. 134), this debate has hampered the full evolution of case study research. Gerring, (2014, p. 341) argues that much of our empirical knowledge we currently have, actually come from case studies, yet, it is still undervalued or ignored as a valid research method.

Case study is a “*study of a single unit with an aim to generalize across a larger set of units*” (Gerring, 2004, p. 341). In practice, it focuses on one in-depth example of a broader phenomenon where the researcher aims to explain its features. It tells a story about something specific and special that can be then generalised more widely. A case study “*would describe what happened when, to whom, and with what consequences in each case*” (Neale, Thapa & Boyce, 2006, p. 3). As a methodology, case study provides us with tools to explain those features of the phenomenon, no matter how complex it would be. (Baxter & Jack, 2008, p. 544; Gerring, 2004, p. 344)

In research there can be only one case studied or there can be several cases. More cases included, less closely they are studied and can even become samples rather than case studies as such. (Gerring 2004, p. 345.) In this research I have only one case but it is studied closely and carefully. Often case study researchers are asked how a single case can be generalised scientifically. According to Yin (1994, p. 10) cases are like experiments that can be generalised proportionally. They are not samples of the general populations that can be applied for the whole universe, but the researcher rather tests the theories and generalises the theories to the cases.

Case study does make statements that are turned into a theory. To back up that theory and to generalise case studies, the researcher needs to present the supporting evidence as in any other research method. That includes how the researcher generalises the case study into a larger context: e.g. can the single instance present other similar instances, or are the features

of one part of the case applicable to the whole of that case. (Cohen, Manion & Morrison, 2007, p. 254)

4.3.1 Case study as a story teller

Case study is the appropriate method to be used when the researcher has an interesting story to be told, and can provide more complete picture of the events other than just raw data, describing human relationships and interactions (Neale, Thapa & Boyce, 2006, p. 4; Cohen, Manion & Morrison, 2007, p. 253). It provides closeness to the real- life situations with “*a nuanced view of reality*” as often behavior cannot be described simply with abstract theories (Flyvbjerg, 2006, p. 223).

CASE STUDY		RESEARCH	
strategy	form of research question	requires control over behavioural events?	focuses on contemporary events?
experiment	how, why	yes	yes
survey	who, what, where, how many, how much	no	yes
archival analysis	who, what, where, how many, how much	no	yes/no
history	how, why	no	no
case study	how, why	no	yes

(Yin, 1994, p. 6)

According to Yin (1994) as well as Baxter and Jack (2008, p. 546), case study should be the preferred method when the research questions are looking answers to how or why, and when the research focuses on the contemporary events that the researcher cannot manipulate, like he could in an experiment. This corresponds well with the research questions and the chosen method in this research.

Instrumental case study is used to gain understanding and insight to a specific situation. Even though the case is studied in depth, it is only to the secondary interest of the researcher; it is there to provide support and to cast light to the researched phenomenon. (Baxter & Jack, 2008, p. 549) In this research the main interest is to find out how the students develop their moral understanding in PjBL situations and the case is here to give and support evidence and to give examples from the field. When we have the need to understand something complex and social, a real-life phenomenon, the case study allows us to get a holistic access to the manifold phenomena. (Yin, 1994, p. 3)

In this specific case study there was no importance on the school or grade the project but only the experience, the project as a case itself, can cast some light on the research questions. In the end, the case studied in this research is a 3rd grade class of 40 students with shared teacherhood by two teachers. The school is a relatively big school in the North of Finland with a close access to nature but also to urban areas. The interviewed teacher is an experienced PjBL teacher but the case studied here is from the autumn term 2016 with the requirements of the new Finnish Core Curriculum.

In this case I chose to interview the teacher rather than the students because I wanted to know more about the planning phase of the project and how the teacher had evaluated the moral growth her the students, if the students had shown any change during or after the project took place.

4.4 Interview as a data collection method

As the method to collect data for this research I chose to conduct an interview with a teacher who has conducted a PjBL project with her students. The interview was made in December 2016 via Skype due to accessibility because of a long distance. Before conducting the interview, I had to bear in mind the ethical dimensions of it. The letter of consent (Appendix 1) was sent out to the interviewee and the interview was not carried out until it had been returned to me. The letter included the guarantee of confidentiality and the assurance of the interviewees rights to stop or retire from the research at any point. During the interview it was expressed clearly when the recorder was set on and off. (Cohen et al. 2007, p. 362)

Interview is one of the most common research methods used in case studies and in qualitative research in general. Through an interview the researcher tries to understand the lived world through a human experience, giving the voice to the common people. An interview is a multisensory channel where also the non-verbal data can have a meaning from silence to the physical position of the interviewee. The interview is a situation where the interviewer has the control to guide the interview to a certain direction but yet there is plenty of space for spontaneous interactions. The researcher has the possibility to press for more detailed answers or dig deeper in the topic. (Cohen et al, 2007, p. 349-383, Kvale, 2006)

As Cohen et. al (2007) emphasise throughout the whole book *Research Methods in Education*, an interview is not just an event where the researcher asks questions and collects data for the research. It should be a social interchange of views where the views of any participant can change or evolve even during the interview, and to be a positive experience for all. These views then can be discussed and the participants can express their own points of views in depth. However, it is not to be confused with ordinary, natural conversations we have every day; an interview has a purpose, it is somewhat constructed beforehand, and it follows certain rules. (p. 350-355) Kvale (2006) also points out that an interview is not a dialogue due to the power structures of the setting; the interview serves only the purpose of the interviewer who also has the power to manipulate the interview to the wished direction.

When planning the interview, I created an interview guide (Appendix 2) which was also shown beforehand to the participant as wished for. The interview guide included all the topics and themes I needed to cover in order to find answers to my research questions, but were not fixed in order or in word form. The whole interview guide was designed based on the research objectives, that were translated into a set of themes and questions. I was trying to

be as specific as possible so that the questions would reflect exactly what I was trying to find out. During the interview this guide proved to be highly useful in staying on topic and it has also helped the participant to prepare herself for the interview while the interview remained conversational. The data collection proved to be systematic and I could anticipate the gaps in the data thanks to the interview guide. (Cohen et. al, 2007, p. 355-356.)

Cohen et. al (2007) reminds the researcher to take into account a set of factors, which includes knowing the subject matter but also the interviewee when planning the questions for the interview (p. 356). As an example, we cannot have the same set of questions for children and for adults. When it comes to this research, I had personally never met the teacher I interviewed but I could make some assumptions on what type of information she might possess (teacher), her level of education (Finnish primary school teacher) and her level of motivation as a volunteer to participate in this study. Also, my interview was mostly opinions of the interviewee and less facts. Anticipating these factors, I could move on to decide what type of questions I could and should ask.

To be able to design and conduct a successful interview, the researcher needs to be sufficiently knowledgeable about the topic. This is why it is important to follow the Kvale's seven steps in the right order. Interviewee might even feel disappointed or threatened if the researched comes across as a novice of the subject matter (Cohen et al, 2007, p. 362). This is why I studied closely the theories of moral development as well as PjBL, with all the definition of the vocabulary before advancing with the interview. I felt it to be important to be able to talk about the topic as an expert.

4.5 Transcribing the interview into raw data

At a glance, it might seem as an easy task to transcribe an audio file into a text file. However, it is one of the crucial steps in interview-based research. If transcribed wrong, there can be

a data loss that will have a significant influence in the results of the research. This is the time when a social encounter (interview) is translated into a record of data, a frozen moment. In an interview the tones of voice, the positions of the participants and the moments when nothing is being said form the entity of the social encounter. It is important then that this data is not being lost. (Cohen et al, 2007, p. 365-367)

However, in this research some of the social aspects of the interview were missing as the interview was conducted via Skype due to the physical distance between the interviewer and the interviewee. It could be basically referred to a telephone interview as even the visual aspect was missing in the call. Telephone interviews are common but also need to be justified. In this research I am not investigating the attitudes, that are often expressed via corporal messages, so the visual and physical connection and the record of them was not such a requirement here. Moreover, the questions did not address too complex or sensitive of issues, or no hearing impaired, marginalised or second language speakers were interviewed. (Cohen et al, 2007, p. 381.) The relationship was established through a casual talk of ourselves before moving on to the recorded part.

When it comes to transcribing the recorded interview, I could not find any single correct way of doing it, and same is said by Cohen et al (2007, p. 367); it all depends how the transcription is being used and how useful it is for the success of the research. In this case, the interview is the only data collected so the transcription also becomes the single source of data material.

As the participant was so well prepared for the interview and was a real expert of her field, the interview flowed smoothly and there were not many moments of doubt or pauses to think. This also made the transcribing easy. In the end, I only wrote down everything detail that was said without altering the text but also without adding any pauses or moments of silence. They seemed irrelevant to the aim and outcome of this specific research. All the information that was relevant, was expressed through words – this research did not measure the opinions or attitudes.

4.6 Analysing the data

Once the researcher has his data available, they start to interact with each other. In qualitative research the data becomes unavoidably interpretive because the data available e.g. from interviews is a presentation of the participant's ideas, opinions or points of view. It is not a complete accurate representation of the studied subject but rather a living set of data that 'talks' to the researcher. This is what the researcher then interprets. The interviewee does not have any more power to influence the interpretation over his statements, giving all the power to the researcher (Kvale, 2006).

For a researcher it is important to know how the holistic view on data is greatly important, not only the fragmented, separated pieces of information. As Cohen et al (2007, p. 368) puts it: "*in interviews often the whole is greater than the sum of the parts.*" This is why I started analysing the data by first reading through the transcription a couple of times, getting the holistic feeling that was transmitted to me through the data. This is also the first part of the data analysis report. Only then I could start to get the different feeling of different parts and could start clustering them into different categories that would give answers to my research questions and connect them with the theory.

I organised the analysis process by the research questions that guide my research, as suggested as one method by Cohen et al (2007, p. 468). This proved to be highly useful way to get all the data relevant to this research. This way I found answers to all my three questions that I had had since thematising and designing the research, to my research questions. In the data analysis chapter, the report also follows the same path. I go through question by question, with data from the interview. In this part I was very careful not to leave out any data that could be relevant to this research. I first organised the data in big chunks of information, only to realise that such a big piece should be broken down into smaller pieces – one sentence could have answers to more than one question. If then there was any piece that did not go under any category, I would put it under "*the other*" but not delete it. I might need to get back to it and revise the information later on. I color-coded the question-answer connections and copy-pasted them under the relevant question. This helped me to get an overview of the variety of the answers and for which question I had received the most information

4.7 Reliability, validity, and reporting the research

The reliability of a research is achieved after minimising the possible errors and biased stances. This is done by documenting carefully the whole research process from the beginning till the very end. That documentation should be operational so that anyone could repeat the study exactly the same way. (Yin, 1995, p. 36-37.) This is why I have reported my research methods in detail and I have brought my personal stance to the daylight. This personal stance is connected to the verification of the research because it has defined the motives for this study and specific ways of interpreting the data.

Verification of the research is done during the study but also afterwards, in order to ensure the reliability of it. The process of verification starts from the very beginning; finding the logical link between the motives of the study. It moves on to the theories of the study, to the research questions and through transcription process where the fidelity to the interview is maintained. (Cohen et al., 2007, p. 372.) The validity of the research is demonstrated in the research report where I have stated all the steps of the research openly. It includes a careful description of the chosen methods and explanations of the data collection process, as well as the analysis and interpretation of the data in the light of the different theories used. (Cohen et al, 2007, p. 373.)

I have been careful when conducting and writing the research report having the validity aspect constantly **in my mind**. Reporting the process honestly and clearly also helps the first-time researcher--like me--to get feedback from the reader regarding the success of the research. This research and all the steps are meant to be written down in a manner that the reader understands all the steps I have taken and the reasons behind each of them. The validity, thus, can be valued throughout the paper.

5 FINDINGS AND ANALYSIS

This chapter is dedicated to the analysis of the data. As mentioned earlier, the data is clustered under each research question. This is the part where the researcher is in dialogue with the collected data. I will start with the holistic feeling from the data, the overview, before I will move on to the research questions and cut up data. I have explained the different parts of PjBL that came through the interview, so the data also describes how to plan a project. Those parts relevant to moral education are analysed and linked to the moral theories introduced earlier.

The data is collected in Finnish but for the reference of the reader I have translated the excerpts into English. I paid plenty of attention to the translation part so that the message would not be altered or changed. However, I am no translator so there might be some mistakes in the nuances and in the choice of words. For validity, the excerpts are also in the original languages under each translation.

5.1 The holistic feeling of the data

When going through the data as a whole unit, it gives the reader a positive feeling. The teacher seems to be happy about the success of the project and she uses phrases like ‘started to live life in their heads’, ‘important’, ‘shared thing’, ‘learning for life’, ‘wider perspective’, ‘understand’ or ‘learning to express oneself’. The choices of the words are in align with the new Finnish core curriculum what emphasises skills for holistic understanding and learning for life (Opetushallitus, 2016). Per Algreen-Ussing (Graaff & Kolmos, 2007, p. 4), project-based learning is seen to benefit both aspects when the students learn big units of various subject matters that are inspired by their own lives. Also moral education provides skills for

life when the students challenge their perceptions and develop their moral understanding about life in general (Nodding, 1984).

The teacher describes the learning targets with special care and is more focused on the content matter than the values it carries. She refers to the national curriculum and to the school curriculum many times to support her project. The new aspects of the 2016 national curriculum are often mentioned and she especially brings up the transversal competencies and multidisciplinary learning that also formed a big part of their project.

5.2 Project-based learning as an influencer for moral development

In this chapter I have analysed the data regarding the first research question; in what ways can an educational project aim to influence the moral of the students? What is the role of PjBL in influencing it? When going through the data I observed two main themes and then clustered the data under them. The themes were:

- before the project: the planning (curriculum, learning targets, methods)
- during the project: spontaneous need for discussion

The first part is about the planning phase of the project. It includes curriculum overview on content matter and value base that the teachers chose as part of this project. The project also had an emphasis on certain themes that were chosen specifically for this specific group of learners. I will also go through the methods the teachers had chosen to use and how they form a part of project-based learning.

The latter part is dedicated to the needs that rose as the project went on. No matter how well a project is planned there will always be a need to have space and time for spontaneous discussion that rises from the interests and needs of the students (Thomas, 2000). Sometimes these topics come when the students dig deeper into the content matter and sometimes through incidents or accidents, or when the old schemas collide with the new ones. The

methods can also bring unexpected need for classroom discussion especially if the students or the teacher are not used to them (Krajcik & Blumenfeld, 2006).

5.2.1 The planning phase

There are many ways pupils' morals can be influenced through conscious planning of the educational project. The national curriculum and school curricula give guidelines for the teacher in the planning and even concrete values and content matter that should be brought up during each grade. In Finland, the national curriculum is to guarantee quality education for the whole population so that no child is left behind, whereas the school curricula give space for planning according to local needs because not all geographical areas are comparable to each other (e.g. urban vs. rural). (Finnish National Agency for Education, n.d..)

In this case study, the Finnish national curriculum as well as different school curricula were the starting points for the planning of the project. The two teachers went through the curricula and combined various third grade subject learning targets as well as recommended values under one main topic; *On the Beach*. The content came from the Finnish national curriculum's sections for subject matters. The 2016 curriculum also emphasises the importance of transversal competencies that are aimed at influencing not only the skills and competencies of the students but the attitudes and values (Opetushallitus, 2016, p. 20). The school curriculum combined with the transversal competencies provided the value base for the project.

All the third grade natural sciences... like the curriculum of natural sciences. --- So there are the school's values stated for each grade level and moreover now that we have these goals of transversal competences so these values are like part of this transversal thing.

(Kaikki kolmannen luokan ympäristöopin... niinku ympäristöopin opsista. --- Eli on kirjattu koulun arvot jokaiselle vuosiluokalle ja sitten nyt vielä että kun

on nämä uudet laaja-alaiset tavoitteet niin nämä arvot on niinku osa tätä laaja-alaista juttua.)

As subject content the teachers had taken the national curriculum on natural sciences and combined it with the new demands on cross curricular themes, which means combining different subjects under the same theme. This way the subject lines become blurred, requiring students to use various skills and knowledge not only specific for a certain subject matter. The aim is for the students to combine those competencies with values and attitudes, in order to grow and learn to the fullest. (Finnish National Agency for Education, n.d., p. 20.)

If I list what the third grade curriculum has for physics and chemistry is water's three states of matter, the circulation of water, then there is getting around safely, moving around by bike and safely on water. Familiarising oneself with the local map, waters and beaches as eco system, rights and duties in the nature, conducting research, and water consumption. And all this we joined under one multidisciplinary learning module and we named in "On the beach".

(Jos mää niitä luettelen sieltä opsista niin niitä on siellä kolmannen luokan opsissa fyysiikka-kemia osuudesta veden kolme olomuotoa, veden kiertokulku, sitten siellä on turvallinen liikkuminen, pyörällä liikkuminen ja turvallisesti vesillä. Oman lähiympäristön karttaan tutustuminen, vedet ja rannat ekosysteeminä, ympäristössä toimimisen oikeudet ja velvollisuudet, tutkimuksen tekeminen ja veden kulutus. Ja nämä kaikki yhdistettiin yhdeksi kokonaisuudeksi ja sen nimeksi tuli "Rannalla".)

In PjBL the contents approach emphasises the real-life connection in the meaningfulness of learning. In this case when studying beach life and water, it would not be possible without having the water or the beach as a concrete element available to the students. This is then why the teachers had taken the students on field trips to the beach to spend days by the local lakes. There the students could conduct real water investigations, take samples, get familiar with the vegetation that grows near the water reserves, and find out what type of things they can find in the water. This is how the learning process started, with a topic derived from real-life, from the everyday life of a third-grader but with the real elements from scientists working on the field of natural sciences. This way the students were provided with motivation to learn and the process could get a kick-start. (Hanney & Savin-Baden, 2012.) In educating

for respecting the nature, the connection that the students have with the nature is crucial. Without personal experiences and awe-inspiring moments in the nature the respect the future generation has for the nature cannot reach the maximum potential – those encounters in the nature are the key in moral education as well. (Walinen & Överlund, 2011.)

By creating learning situations outside the classroom, the teachers could also combine learning targets from the national curriculum other than those directly connected to water, e.g. road safety. In this case, the trips to the beach were made by bikes which provided new opportunities and platforms for a classroom discussion. This was decided already in the planning phase so clearly the teachers wanted to broaden the scope and show the students how various topics can have a connection, and how learning does not happen in a bubble. (Thomas, 2000.) This is the connection of subject matter to the transversal competencies what the teacher refers to learning for life.

Well this is exactly these things about transversal competences... that we learn this for life.

(No tää on just näitä laaja-alaisen oppimisen juttuja että näitä opitaan niinku elämää varten.)

In the data, the teacher describes the content learning goals with a great detail. However, the values are mostly set aside. This is because when planning the project, the teachers created the learning goals based on the subject matter. The values they discussed in this phase were more as a note for themselves and not regarded as learning goals as such. According to the teacher her school's curriculum provides plenty of values specific for each grade level and they tried to match them as well as possible with the subject matter learning goals.

And as there [in school's values] they have various values listed for the third graders so we took what we would use in this project. --- And these values that the school has mentioned that the third graders need to learn during the third grade fit really well into this project. Yes... so we took those into this project. Then we just need to take care that the rest of the values we have in something else at some point during the rest of the year.

(Ja kun siellä [koulun arvoissa] on kolmannelle luokalle arvoja eri asioihin kirjattu ja me sieltä poimittiin mitä arvoja me tässä projektissa käytetään. --- Ja nämä arvot mitä on kirjattu koululle että kolmasluokkalaisten täytyy

tämmöisiä arvojakin oppia kolmannen luokan aikana niin nämä arvot sopi todella hyvin tähän projektiin. Joo että nämä niinku sitten otettiin tähän projektiin. Sitten huolehditaan että ne muut arvot tulee käytyä vuoden aikana jossakin muussa.)

It is possible to have values as the base of the learning and plan the learning process and content around them, which was not the case in this project. We all need moral education because we are not born with our beliefs but the world shapes them and they develop as we go. (Wall, 2010, p. 169.) At the end of the interview teacher admits that the values were set to minimum and there would have been space for more value based learning. As a reason she mentions that they had not wanted to confuse the students by adding too much content, so the emphasis was more on the content than on the values.

No, this is very minimal and probably we could have put more values into this but we were trying to limit them so that they are achievable and the child would understand that we are practicing these things in this project. --- there are really million values and goals for transversal competencies. We could have put a huge amount of them here but we decided to take just seven bigger topics that these are what we do in this project and these are what we emphasise in this project.

(Ei kyllä ei, nämä on kyllä niin minimissään että tähän olis varmaan saanu enemmänkin laittaa arvoja muuta kun me yritettiin niinku rajata vähän että pystyy nuo niinku saavuttamaan ja sitten lapsikin ymmärtää että näitä asioita tässä projektissa niinku harjoitellaan. --- niitä on oikeasti ihan miljoona niitä arvoa ja just näitä laaja-alaisen osaamisen tavoitteita. Niitähän olis saanu tähän ihan hirveä määrä mutta me otettiin niinku vain seittemän isompaa juttua että näitä tehdään tässä projektissa ja näitä korostetaan tässä projektissa.)

Walinen and Överlund (2011, p. 79) ask the question whether learning subject matter is relevant at all if we do not learn the morals, such as respect for the nature. Teachers have always been considered as some sort of moral educators but in the bounds of curricula and professional ethics. The curricula can give guidelines and directions for the moral education but in the end it will be up to the skills and motivation of the teacher how she or he will incorporate them into her teaching and planning (Walinen & Överlund, 2011.)

And then we had as a value that a child will get familiar to their immediate surroundings and to the water reserves of the area, the child pays attentions to their own water consumption and the child reflect the impact of their own consumption to the nature and to the water system.

(Sitten meillä oli siellä arvona että lapsi tutustuu lähiympäristöönsä ja alueen vesistöön, lapsi kiinnittää huomion omaan vedenkulutukseen ja lapsi pohtii oman kulutuksensa vaikutusta luontoon ja vesistöön.)

DiMasi (2012) sees philosophical discussion as a tool to develop the complex moral thinking processes: it can open doors for emotions and provide a place for the students to express those feelings. During the project, the teachers had purposefully incorporated some discussion into the project that would require moral thinking and evaluation of own actions. In one part of the project, this was connected to water and the consumption of it. The students were to pay attention to their own water consumption and the concept of clean water was brought into the discussion. The teachers broadened the discussion from the immediate environment of the students and incorporated the global education perspective with the project's theme.

And overall when they, when the child pays attention to their own water consumption and when we talked about it and kept a record of it, yes they did understand. ---- And then when we watched videos that not everywhere in the world they have clean water and all, of course they understood that we have clean water and we need to pay attention to the consumption of it.

(Ja sitten ylipäättänsäki ku ne, ku lapsi kiinnittää huomiota omaan vedenkulutukseensa ni kyllä ku niistä puhuttiin ja niitä seurattiin niin kyllä ne niinku ymmärsi. --- Ja sitten ku me katottiin videoita että kaikkialla maailmalla ei ole puhdasta vettä ja näin ni kyllähän ne sen ymmärsi että meillä on puhdasta vettä ja vedenkulutukseen pitää kiinnittää huomiota.)

This way the teachers purposefully joined the project theme with cognitive moral education. The students first learned about clean water and the importance of it during the project. The cognitive knowledge on the topic was then connected to a rigorous classroom discussion on the value of clean water. This gave the students a chance and tools to connect the moral side of the water question into their daily lives; the control we have over our water consumption.

Here the cognitive training (water as an element) took place first in order for the moral training (“*how can I save water?*”) to take place. (DiMasi, 2012.) Teachers cannot provide ready answers for moral questions, the child is the one with the active role (Fleming, 2005, p. 21.) Teachers are there to discuss and compare, to help the students to find their own paths. This should start as early as possible because adopting values and developing moral thinking takes plenty of time and lots of purposeful work. (Suhonen, 2012, p. 26; Walinen & Överlund, 2011, p. 78.)

The project also included moral development in the context of peers and coworking. When a teacher plans a project-based learning situation, the options are limitless. In this project the teachers had decided to focus on certain learning goals and values, so they had to scope out the options and then limit the choices. The teacher is the one who knows his or her group of students the best and knows their areas of weaknesses, so they have the tools to plan accordingly. As in this group of students there were many newcomers, the teachers had decided to focus on groupwork and to develop the skills the students need in such situations. Plenty of time was spent on discussing the group work dynamics and little by little the students learned to work with everyone and to take the initiative to look for different partners.

And in this project we took as the most important value that the child learns to work with everyone. It was like the most important one. --- So we took this because we just had plenty of new children when we moved into the new building, so learning to work with everyone. It was like the common thing that we emphasised always when we worked in pairs and when we changed pairs that do not go into the same group as before, you were in that group last week so change the group.

(Ja tässä projektissa me otettiin niinku tärkeimmäksi arvoksi että lapsi oppii työskentelemään kaikkien kanssa. Se oli niinku sellainen tärkein. --- No otettiin nämä just tässä meille tuli paljon uusia lapsia ku muutettiin sinne uuteen taloon niin just tämä että lapsi oppii työskentelemään kaikkien kanssa. Se oli sellainen yhteisjuttu ja sitä korostettiin että aina ko tehtiin parin kanssa ja että kun vaihdetaan paria niin et mee samaan ryhmään, että sä oot viimeviikolla tehny siinä ryhmässä että vaihappa nyt ryhmää.)

Focusing in working with peers brought in the social approach of learning which is essential in PjBL (Railsback, 2002). Moreover, our moral thinking is highly influenced by the interaction with the others and we need peer interaction on order to challenge our old schemas (Wall, 2010, p. 169). Working together, the students get to learn from each other and have chances to share their knowledge. In this, the environment is important and the teacher should aim at creating a friendly one where no one needs to be afraid to express themselves (Gibbs, 2003, p. 34-36). In PjBL students are allowed to be exactly who they are, and they get to bring their unique contribution into the group work. (Railsback, 2002.) The meetings of people representing different backgrounds also provide a fruitful platform for moral discussion and trigger the process for change (Endicotta et al., 2003).

Before a project can take off, the teacher needs to plan the working methods that are available for the student use. As the students were young at age, this project was chopped into smaller pieces to help them in understanding of the content. Each two or three weeks the class focused on one part of the project that would get continuum within the following weeks. The project was not offered to the students as a whole entity which could have been overwhelming for a third-grader.

And that project then we chopped into partial goals so that we advanced in two-three week parts which all included different things and different methods. One we did in pairs, one in groups, then we switched groups.

(Ja sitten tämmöinen projekti pilkottiin osatavoitteisiin elikkä me aina edettiin parin kolmen viikon pätkissä missä oli eri asioita ja eri menetelmin. Yksi tehtiin parin kanssa, tehtiin ryhmässä, vaihettiin porukoita.)

The project was divided into smaller goals that were more reachable for a young student. It was scaffolded to match with their respective age group. The methodology was still challenging for them, as it should be. If a project is too easy, it becomes an exercise and the learning is left to the minimum (Thomas, 2000, p. 4). Teachers had opted to use weekly targets in advancing with the project. They used a goal board that was hanging in the classroom all the time. From there the students could check the weekly goals and continue working towards them.

And --- what we emphasised a lot was that the children learn to work with set goals and with sense of responsibility, that once you have the goals you will

have them visible all the time on that board and towards those goals you will try go during this week. So that it is your responsibility and your job to take care of, that you do your way towards those goals.

(Ja --- mitä paljon esille otettiin myös lasten kanssa oli että lapsi oppii toimimaan tavoitteellisesti ja vastuullisesti, että kun sulla on ne tavoitteet ja sulla on ne koko ajan näkyvillä tuolla taululla niin nuita kohti sinä yrität sitten aina tällä viikolla mennä, että se on sitten sinun vastuu ja sinun työ hoitaa että päästään kohti näitä tavoitteita.)

The goal board was explained to the students and how it was the responsibility of them to achieve their goals. The students were showed this way, that the learning that takes place is for themselves. They are the problem solvers and the decision makers, they observe, ask and take control of their own work (Intel Teach Programme, 2012). To reinforce the sense of responsibility in the students, teachers were using same working method and routine week after week. The routine included this board where all the weekly plans and learning targets were written down.

And then we have this target board where each week we write down the goals and what we do this week and which subject matter it is connected to, so it becomes easy for the children to perceive.

(Ja sitten meillä on sellainen tavoitetaulu mihin me viikottain kirjataan tavoitteita ja mitä me tällä viikolla tehdään ja minkä oppiaineen asioita me tällä kertaa käsitellään tässä yhteydessä, se on helppo lasten sitten hahmottaa.)

This was used as one of the main tools for the students to follow-up with their own work so that they could work as autonomously as possible as they should in PjBL. Teacher as a facilitator of learning had provided prerequisites in the form of goals to move on; what the students need to know and to be able to do in order to move forward.

As seen from the analysis, the planning phase of the project is highly important and there are many things to be taken into account. The project needs to be relevant to the lives of the students but at the same time provide real-life experiences and to be similar to those of real scientists. The project needs to be challenging but at the same time scaffolded to match the

age and level of the students. No matter how well a project is planned, one cannot always anticipate everything. There will be need for extra time and space for classroom discussion on moral issues, and maybe even to a change of course in the content matter.

5.2.2 The rising needs

During a project there are many good chances for spontaneous moral education. It can vary from anything about the project's theme the students are wondering about to incidents that take place while the students dig deeper into the world of the PjBL.

As the project went on the values came from doing or when something happened or when the children were wondering about something, commenting something, so we would always go back to that and talk about it.

(Siis projektin edetessä niitä arvojan siis niinku tuli tekemisessä tai sitten kun sattuu jotakin, tai sitten kun lapset ihmetteli jotakin, kommentoi jotakin, niin sitten niihin aina niinku palattiin ja niistä juteltiin.)

It is important that the teacher notices the always rising needs. It is not only a sign that the students are ready for moral discussion but it also forms the basis of PjBL. PjBL is highly student-centred and all the learning starts from the needs of the students. This way the students get to share and talk about each problem as they rise. (Krajcik & Blumenfeld, 2006, Railsback, 2002.) Also Thorkildsen (2013) considers moral education to be an anywhere-anytime process, where the new problems are immediately dealt with and the students are given the time, space and guidance to ponder about the issues. This moral learning will take place in different ways from direct instruction to group work.

When the teachers were taking their students to trips to the lake or to the forest, there were constantly new topics rising that created need for further discussion whether in relation to the theme or not. The real-life surroundings created an authentic environment for talk about sustainable development and human responsibility in relation to that.

When we went, so we had another trip to the river to go and fish, so when we moved around in the forest we had to talk about the freedom to roam that can I climb every tree and can I take stones and pine cones with me.

(Ja sit ku me mentiin, sit meillä oli toinen retki niin ni tuota mentiin tuone joelle kalaan niin me sitten liikuttiin metsässä niin siellä oli taas sitten nämä jokamiehenoikeudet että voiko kaikkiin puihin kiivetä ja voiko täältä kaikkia kiviä ja käpyjä matkaan ottaa.)

The idea of sustainable development is that we as humans have a moral obligation to live in a way that does not impose danger to nature and ecosystem (Bowers, 1995, p. 25.) Moreover, it is considered to be a way of living that meets our own needs without jeopardizing the needs of the future generations (United Nations, n.d..) Fruitful grounds for rational thinking for the moral schemas to change and develop were offered to the students in the middle of the nature – the real-life environment so important for both moral development to happen but also to PjBL to take place.

The trips to nearby places provided the students together with their families more knowledge about their own surroundings; how close to home there are places where you can enjoy the pure nature and spend time in the forest.

Not many had been to such a place. Actually for many families it was a new thing as well, that really, there is a lean-to so nearby, what a cool thing.

(Niin ei siellä ollu semmosessa paikassa moni käyny. Se oli itseasiassa monelle perheellekki uus juttu että näinkö lähellä meillä on laavu, että aika siistiä.)

The families were included as part of the learning process and were kept updated as the project went on. This way learning becomes more communal and shared, bringing the social aspect of both PjBL and moral development into the classroom.

As the project went on, the classroom needed to have plenty of discussion about responsibility and the earlier mentioned way of independent way of working towards learning goals. In PjBL students learn little by little to take the responsibility of their own learning and to work on their goals. PjBL is about the whole process that takes place during the project and not about any end product as such (George Lucas Educational Foudation, 2014.) Here one of the processes was learning responsibility which is a value highly regarded in our society.

The continuity of learning will force the students to critically evaluate their own work and effort they put in it. In such a case school is not seen as a knowledge giver anymore, but the students have the responsibility of their learning (Nodding, 1984.) The responsibility of own learning was also one of the highlighted goals in the case studied. A lot of effort and time was put to develop it as the project went on. It was not an easy path the teachers took as there were many dilemmas with the students' old ways of working and with the new expectations.

But maybe what we most talked about was the responsibility, that I achieve the goals and I work in a responsible manner, and how do I proceed now so that I can move forward in this job. And in this we contacted the parents quite a few times, that please also talk at home how this works and could the child maybe continue their work at home and could they get help... that is what happened as we went on.

(Mutta ehkä kaikkein eniten mistä me sitten niinku keskusteltiin viikoittain niin oli tästä vastuusta, että saavutan ne tavoitteet ja toimin vastuullisesti, ja että miten mä pääsen etenemään tässä omassa tekemisessä ja omassa työssä ja tähän sitten niinku otettiin paljon vanhempiinkin yhteyttä että jutelkaapa kotona että miten homma etenee ja voisko sitä hommaa tehdä kotona ja voisko saada apua ja sitä tuli siinä matkan aikana sitten.)

Adding the dialogue between home and school, the students' moral schemas regarding work and responsibility got reinforcement and the change could start taking place. Parent involvement is important especially if the child is in the second stage of Kohlberg's scale of moral development. Then the child wants to please the people important to them and that way they try to gain acceptance. Having said that, when the parents get involved with the learning process that is happening in the school and work together with the teacher, the child will see how important his learning is for the whole community and turn the moral reasoning into moral action. (Kohlberg, 1985.) Also Wall (2010, p. 169) sees the influence of the other community members to be highly important. We are not the original source of our belief system but we get influenced by the people around us. We simply take those pulses and interpret them regarding to our own relations and reasonings.

During the project there was plenty of time spent on classroom discussion. In some parts that was anticipated already during the planning phase and the board with tasks and goals was created to guide the students towards more independent work. However, that needed plenty

of reinforcement and a lot of time was dedicated to that. With all the time and space and motivation, how then the students demonstrated their development during the project?

5.3 Changes during the project

As mentioned before, during the project there were various occasions when an unexpected need for moral discussion was demonstrated by the students. That would come from incidents and wonderings that in the spirit of PjBL the teachers adopted further into the classroom discussion.

That we took their...that it started from them [students].

Että tartuttiin niihin heidän, että se lähti heistä [oppilaista].

It is important that the teacher knows her students and that the teacher has eye for spotting their needs. The teacher should not impose her own values but give space for the exchange of the views for the students (Klaasen, 2012, p. 17). It should start from them and finish with them; the children are capable of moral thinking, even very complex ways (Wall, 2010, p. 169). The adult is there to assess what is important for the children; they should be guided to talk about topics that are important, children's time is also valuable and should not be wasted on topics that are useless or meaningless for them (Mortari and Mazzoni, 2012, p. 109).

The topics that came across as important varied from values to more concrete topics like road safety or fish. For example, during the bike trips there were accidents that triggered discussion. The teacher mentions that as the project went on they arrived to the topic of fish, the students founded to be important and interesting and they wanted to learn more about different species. The class then continued working on that topic learning more about it.

It was important for them, the fish, so we took that and they could still make presentations about fish.

(Se oli niinku tärkeä heille se kala ja sitten ne kalat nostettiin sieltä sitten esille ja saivat sitten vielä kirjoittaa niistä kaloista vielä esitelmät.)

By taking into account the students' needs and interests, the teachers as adults were sending a message to the students that their opinions and ideas also matter. They gave the students an active role in developing their learning and moral which is essential if a moral is to be developed, according to the cognitive theory (Fleming, 2005, p. 21.) For cognitive moral theorists the content matter also matters as according to cognitive theory, one cannot develop their moral without having some cognitive understanding of the topic (DiMasi, 2012.) This is why it is important for the teachers to see what the students need more knowledge about in order for them to understand the cognitive and moral aspects of the topic. In this project the students needed to understand the traffic safety rules in order to understand why we need to move around safely, or they needed to know more about the fish in order to understand why we need to protect the waters the fish live in.

Teacher pointed out several times during the interview how the beginning of the project had required a lot from the teachers but also from the students. The new ways of working with everyone to taking the responsibility of own learning were not self-evident. Teachers spent plenty of classroom time guiding the students to the new ways of learning that in the end paid off. For example, during the project students practiced switching between working partners and working groups. According to the teacher, in the beginning this had to be encouraged continuously but as the project went on, the students started to demonstrate their skills for choosing a partner who they have not yet worked with. They demonstrated their new ability to work with everyone.

And when we had done that for ten weeks and in the last week when you told them to form groups you didn't need to continue that form a group with people you haven't worked with yet but they did it themselves, they knew that one needs also to work with other friends and with other people.

(Ja se ku sitä oltiin tehty kymmenen viikkoa ja kun viimisella viikolla sitten ku sano että ottakaapa ryhmät ni ei tarvinu sitten enää jatkaa että mutta mene uusien ihmisten kanssa vaan ne jo teki niin sillä tavalla että ne jo tiesi että pitää taas vaihtaa kaikkia kavereita ja tehdä eri ihmisten kanssa.)

By working with different people, the students had to encounter different ways of working and communicating. These were real-life co-working experiences, and the students were forced to encounter the dilemmas that were created. According to Endicotta et al. (2003) those real-life situations are necessary in moral development. This way the working moral and group-working skills of the students got practiced and developed in controlled situations at school. They could acquire new updated schemas on working methods.

Also the new ways of working as noted before were time-consuming and required plenty of classroom discussion during the project. The board with tasks and weekly goals was there to support the students but when needed, the topic was discussed together with the students and the parents.

In the beginning it [working towards goals] was really hard but towards the end that was easier as well.

(Alussa se [tavoitteellisesti toiminen] oli hankalaa mutta kyllä sekin sitten lopussa meni jo paremmin.)

The students' schemas on school work were different than what the project required from them. Those schemas were challenged throughout the project. When the old schemas are challenged they opt to change, we upgrade them and take a step forward. (McBride-Pluskwik & Megat Hamari, 2014.) In this case the students were struggling to take responsibility of their own work because it was not part of their schema of how to do school work. As that old schema was continuously challenged they started to take steps forward and their schemas were updated. That takes time and collisions but in the end all biting the bullet paid off.

When the moral education is brought consciously to the classroom it needs guided discussions. Kohlberg (1985) for example was sure that through vigorous classroom discussion the teacher can influence the moral stage her students are at. In this project the teacher brought the daily water consumption to the discussion. Teacher then had noted how by paying attention to their own water consumption it had become more concrete to the students. Combining that with meaningful discussion and learning environment allowing moral development to happen, the students understood their own impact on this issue.

And overall when they, when the child pays attention to their own water consumption and when we talked about it and kept a record of it, yes they did understand.

(Ja sitten ylipäättänsäki ku ne, ku lapsi kiinnittää huomiota omaan vedenkulutukseensa ni kyllä ku niistä puhuttiin ja niitä seurattiin niin kyllä ne niinku ymmärsi..)

The project had provided time and space to learn about water and about the importance of clean water. The students had first developed their cognitive understanding about the topic and once the teachers felt the students were ready, the moral element was brought into the discussion. The students had a chance to accommodate new moral solutions in relation to their own water consumption. Finding out how clean water is a scarce resource in some parts of the world brought the core ideas of moral development, justice and fairness, into the discussion. (McBride-Pluskwik & Megat Hamari, 2014.)

From fish to water consumption, *On the Beach* learning module was a long and diverse project. It was a challenge for the students for whom this was the first this big of a project.

That being able to handle such a huge learning module, I think it is a certain value, that one understands such a multidisciplinary module.

(Että semmosen suuren kokonaisuuden hallinta on ehkä myös semmoinen omanlaisensa arvo, että ymmärtää tällaisen oppimiskokonaisuuden.)

The teacher points out general knowledge as one of the ‘values’ the students learned. This could be considered as the necessary cognitive understanding before the moral side can develop. (DiMasi, 2012.)

And overall the general knowledge, like, when we were having different discussions, the topics they [students] brought up and the general interest...that this was a long project and we handled the water from many different perspectives and how their point of view broadened to see that many things are connected to water and to clean nature and to the life of plants and animals.

(Ja sitten ylipäättänsäki yleissivistys niinku että kun käytiin keskusteluja että millasia asioita ne [oppilaat] otti esille että kiinnostus ylipäättänsä että tämä oli pitkä projekti ja käsiteltiin vettä monelta kantilta ja sitten niinku se näkökulmaki laajeni että itseasiassa monikin asia liittyy tuohon veteen ja puhtaaseen luontoon ja kasvien ja eläinten elämään.)

Teacher had observed a change in the students' interest and knowledge in regards to water, clean nature and the life of flora and fauna. The students had seemed to grasp the understanding of the interconnectedness of all things, how their actions are not separate from the rest of the world. This general cognitive knowledge about nature they had gained during the project seems to be the key in students' critical evaluation of their own actions.

5.4 Changes after the project

The last research question was to find out how the learning that took place during the project was demonstrated – if at all – after the project had already finished. This was to see whether the students had transferred those skills to their everyday lives and other parts of their school day. As seen in the previous part, the students were already showing learning during the project, for example by taking the initiative to include everyone and in working with everyone. Also taking responsibility for their own learning was significantly changed when comparing the beginning of the project and the last days of the project. But what about after the project? Did the students continue showing their learning and had that translated into spontaneous action?

The teacher is reporting that the change in the sense of responsibility continued after the end of the project. After the project the classroom still continued working in goals just like it was done during the project, this time those goals just being more subject matter focused. As a method they use classroom discussion; on the last day of the school week, the classroom gets together to talk about the past week, what they learned, what they need to practice more, and so forth. During the project, the teacher reports, the students had learned that without reaching the weekly goals, there won't be new goals but more practice in the week to come, and this still applies in the way they work today.

So each week we work with goals. On Fridays we check if we have reached the goals what we were working towards this week and together we think about

them. If the children themselves say that they can do it or if someone thinks that he cannot so when we confirm that if it is only one or if there is a bigger group, so then we would need to continue these multiplication tables still next week because we still need practice in it and only then we can move forward.

(Joo siis joo me toimitaan joka viikko tavoitteellisesti että me katotaan joka perjantai että onko me tällä viikolla saavutettu ne tavoitteet mitä ollaan tällä viikolla tehty ja me sitten yhdessä mietitään että lapset sanoo että lapset itse sanoo että osaako ne ja jos joku on sitä mieltä ettei osaa niin sit hei että onko niin että vain yks on sitä mieltä ettei osaa vai onko useampi sitä mieltä että onko joku isompi porukka ja sit on niin että hei että näitä kertotauluja jatketaan ens viikolla kun nämä ei meillä vielä suju ja sitten niinku mennään vasta asiassa eteenpäin.)

This way of working has provided continuity for the students to practice the skills and working methods they already learned in the beginning of the school year. This also shows the students how those skills are transferrable and once something is learned we can apply it to other parts of our life.

This way of working has one important aspect; giving the students the role of evaluators. In PjBL students are their own and each other's evaluators, giving feedback and working together to reach the goals (Krajcik & Blumenfeld, 2006). This mentality had transferred from the ten-week-long project into the classroom where the students continued being the critical evaluators of their own learning. This is also aligned with the spirit of the Finnish Core Curriculum (Opetushallitus, 2017, p. 47) that obliges the teachers to take students to be part of the evaluation process and self-evaluate themselves. The school has plenty of influence in how students see themselves, and the evaluation is one big part of that.

The learning that had happened during the project did not stay only within the classroom walls. The students had also demonstrated their skills with other teachers in other times of the school day, and their subject teachers had noted this shift in this group of students.

--- the goal-directed way of working and responsibility grew incredibly. That was also observed by the English teacher who noticed that when she tells them to open the book on page 50 you didn't need to go yourself to open the book

for them but they were able to do it themselves, and if you told them to do this and this exercise before you can go for lunch then everyone would finish their work and only then go for lunch.

(--- siis tavoitteellisuus ja vastuullisuus niin sehän kyllä lisäänty aivan huimasti senhän sano myös sitten englantiin opettajakin että sen huomasi niistä että enää ei tarvi niinku kaikkia lähteä että kun sanotaan että avaa kirja sivulta 50 niin ei tarvi enää mennä ite avaamaan vaan osasivat sen ite avata ja jos sano että nämä tehtävät pitää ite hoitaa tällä tunnilla ennen ku syömään lähet niin kaikki tekivät tehtävänsä ja lähtivät vasta sitten.)

In PjBL the centre of the students' focus is on learning and doing, not in the teacher's teaching. Teacher will try to make herself an invisible background figure that only guides and helps the students through the project. Blumenfield (Harmer 2014, p. 21) emphasises this being a new pedagogical approach, not a teaching style. The students do not receive anything ready-made but they must work in order to achieve it. This seems not having been the case before in the school. Teachers seem to have done much of the work for the students from opening their books from the right page. When the project thought through new pedagogy of PjBL, the students had adopted this new style also to their learning process throughout the school day. Seems that the change that had happened in one classroom was taken along to other classrooms as well.

According to Kohlberg (1981), when the abstract concept becomes visible, meaning the moral thought is translated into action, the learning as well as moral development has taken place. Here the concept of responsibility and working towards goals had moved from classroom discussion into classroom action. Kohlberg's critics have pointed out how there is no empirical evidence of the connection of the thought and action, but Kohlberg argued and assumed that a mature moral person will have mature moral actions as well. (McMahon, 2000, p. 12.) At least with this classroom, working 10 weeks systemically in a responsible way, had turned into action that still continued after the project had finished.

For Thorkildsen (2013), we need to have moral motivation in order to behave morally. If this component is lacking, there won't be no moral action. Evidently, the teachers had provided the students skills to develop their responsibility but also motivated them to do that.

So they have learned this working towards goals and being responsible. And they know that they can affect it themselves. And also what they have learned is to express themselves. They dare to say things like “I don’t know yet” and other way round as well, “hey we can do this already” so we won’t go through the same thing for a second or third week.

(Että ne on oppinu tämän että tämän tavoitteellisesti toimimisen ja vastuullisesti toimimisen ja ne tietää että ne voi ite vaikuttaa ja niin että mitä ne on oppinu niin ne on oppinu ilmasemaan itseään, ne uskaltaa sanoa että minä en niinku vielä osaa ja myös siis toisin päin että hei me osataan jo tämä ei nyt enää toista viikkoa käydä tätä tai kolmatta viikkoa käydä tätä.)

The project had showed to the students that they were listened to and their ideas were respected. That had motivated them to express their will even in a big group of 40 students where it takes courage to admit if you haven’t learned something. Practicing classroom discussion and listening to each other had provided the students with motivation to do one’s bit. The students knew that they are in charge of their own learning and this is why they cannot stay as bystanders at school.

6 DISCUSSION AND CONCLUSION

The aim of this qualitative master thesis was to explore the ways a project can provide platforms for moral education. The case study provided us with a window to project-based learning with a real-life scenario from the field. The case study was focused on the teacher's perspective and observations on her own students as well as the project she had planned and conducted together with another teacher.

The motivation for this study rose from my own interest; in my final internship I conducted a project and observed the joy of learning in my students but also how effective learning results it could have. During my studies, PjBL was not really even a topic at the university teacher training courses. As the development of the new National Core Curriculum was becoming more current and the multidisciplinary learning modules were confirmed to be part of the new curriculum, the faculty of education also woke up to the fact that there was not much talk and even less action about PjBL in our training. This is why during the final internship the teacher students are now expected to undergo a little project with their students. For me, however, this was still optional.

This master thesis brings a new approach to any studies on PjBL – it combines it with moral education. While writing this thesis I did not come across any research combining these two areas. To continue the research on this field, it would be necessary to do in-depth case studies with observations of the whole duration of the project included. Other option would be for teachers to undergo a project and to conduct action research simultaneously in order to document and report the findings subjectively. This way the data could be recorded in the beginning of the project, during the project and after the project. This study's weakness lies in exactly that; the data is recorded well after the project had ended.

This research shows that PjBL provides a fruitful ground for moral development. Many features of PjBL correlate with Kohlberg's requirements for moral development. According to cognitive moral theory, we need cognitive understanding of a certain topic before we can see the moral dimensions of it. This is why a project is ideal way to combine the theory and hands-on learning and after to bring in the moral side of the story. The project starts with a

real-life topic or issue and the students learn about it in as many ways as possible; books, discussions, interviews, visits, and getting their hands dirty. Once they know their topic the teacher had brought in the moral aspect; in this project the students had observed their water consumption and knowing the importance of water they could now argue for the necessity of saving clean water. It is evident that PjBL provides many chances for the pupils to start wondering and discussing moral issues, which will give them opportunities to rise in the moral development ladder. The teachers had successfully incorporated themes of global education and sustainable development into the project which brought different moral themes available for the students.

Also, the students learned new ways of working and to take responsibility in the spirit of PjBL pedagogy. These values were transferred to the other parts of the school day and were used with other teachers in other classrooms, not only with their classroom teacher using PjBL methodology. Students worked responsibly and were goal-oriented. Working with students with different learning styles and opinions was not an issue anymore. It is significant to understand that one teacher can make a shift in the working methods of the whole classroom and have the students bring that precious skill with them to other parts of their life.

The teacher had mentioned that the learning goals for the project came from subject content. What if the teacher had included the values also as learning goals? What if a whole project would be based on learning values and the content matter would follow that? We could, as Mortari and Mazzoni (2012, p. 109) refer to Dewey, engage the students in moral activities that are useful to their moral growth, not wasting the children's time on meaningless exercises. Or as Walinen and Överlund (1991) sees the subject matter secondary to moral development. Depending on the needs of the class, the teacher can assess the class and create the learning goals and content accordingly, even making the moral growth as a main goal. In the end, the teacher knows her classroom the best and can adjust the goals accordingly to meet the needs.

Knowing what one can achieve with educational projects it opens many doors and the options can be limitless. Could it be that those critical to value based learning, like the columnist Sanna Ukkola (2017), could change their mind when those values come naturally as part of the school day, and first and foremost from the children? Education after all needs to reply to those questions that have no answers, or at least to provide tools for the children

to look for the answers. From my own experience, today's children are highly interested in moral questions and the topics vary from gender to economics, from world politics to food.

After this thesis I am sure I will combine PjBL methods even more in my own teaching. The experience in the final internship was so positive, and combining that experience with research data that proves PjBL not only to develop the knowledge and competencies of the students but also their values and morals, seems convincing. Even if the first part of the path may be a bumpy road and require plenty of work and classroom discussion, it will pay off in the end; the students had become more independent, responsible and able to work with everyone. Sometimes those cross curricular skills can matter the most. Definitely those are the skills that we all need outside and inside those school walls.

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7 APPENDICES

TUTKIMUSLUPA

Hei!

Olen Oulun yliopistossa luokanopettajan tutkintoa suorittava opettaja. Teen parhaillaan pro gradu -työtä ja tutkimukseni aiheeksi olen valinnut omista intresseistäni kummuten projektityöskentelyn ja oppilaan moraalisen kasvun. Kyseessä on laadullinen tapaustutkimus. Haastattelun kautta haluan kartoittaa erään projektin ja opettajan kokemuksia siitä, millä tavoin oppilaat voivat altistua arvokysymyksille ja -pohdinnalle projektityöskentelyn aikana. Haastateltavana on opettaja, sillä opettajilla on kautta aikojen nähty olevan iso rooli arvokasvatuksessa ja oppilaiden moraalisisessa kehityksessä.

Aineisto kerätään yksilöhaastatteluna Skypen kautta. Tutkimukseen osallistuvan henkilöllisyys pysyy ainoastaan tutkijan tiedossa ja koululla tai paikkakunnalla ei ole tutkimuksen validiteettiin vaikuttavia tekijöitä. Ainoastaan oppilaiden luokka-aste tullaan mainitsemaan tutkimuksessa.

Käsittelen haastatteluaineistoa luottamuksellisesti sekä hävitän sen tutkimuksen valmistuttua.

Annann mielelläni lisätietoja tarvittaessa. Liitteenä haastattelurunko.

Terveisin,

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- osallistun yllä kuvailtuun tutkimukseen, suostun haastateltavaksi ja annan luvan haastattelumateriaalin käyttöön kyseistä tutkimusta varten
- haastatteluni voidaan nauhoittaa
- henkilöllisyyteni, kouluni tai asuinpaikkakuntani eivät tule ilmi tutkimuksessa
- minulla on oikeus keskeyttää haastattelu missä tahansa vaiheessa
- minulla on oikeus vetäytyä tutkimuksesta missä tahansa vaiheessa

haluan haastattelun litteroidun version nähtäväksi

haluan tutkimusraportin luettavaksi ennen sen julkaisemista

Haastateltavan allekirjoitus, päiväys sekä nimenselvennys

APPENDIX 1: consent form to participate in the study.

Teemahaastattelurunko

ALOITUS:

- selitä tutkimuksen tarkoitus: projektityöskentely ja arvokasvatus

PROJEKTI:

- kertoisitko yleiskatsauksen projektista, jonka olet tehnyt yhdessä oppilaidesi kanssa
 - o mikä luokka-aste?
 - o kesto
 - o aihe
 - o projektin tarkoitus/tavoitteet
 - o projektin aloitus
 - o projektin toteutus
 - miten työskenneltiin (yksin, pari, ryhmä)
 - o projektin päätös
 - o oletko tyytyväinen projektiin – miksi? mitä muuttaisit?

ARVOT:

- arvot projektissa: millaisia arvoja opettaja haluaa välittää ja miksi?
 - o mitä arvoja itse pidät tärkeänä
 - o millaisia arvoja pidit tärkeänä opettaa juuri tälle ryhmälle?
 - o ujutitko projektiisi tarkoituksenmukaisesti arvokasvatusta/eettisiä aiheita
 - millaisia aiheita
 - miten suunnittelit nämä arvot näkyväksi projektissa
 - miksi juuri tämä/nämä aiheet
 - kuvaile tilanne mihin olit tarkoituksenmukaisesti liittännyt eettisiä aiheita

PROJEKTIN AIKANA:

- projektin aikana ilmenneet tarpeet ja kehitys
 - o syntyikö projektin aikana tarvetta spontaanille arvokasvatukselle
 - millaisia aiheita
 - kuinka paljon
 - miten huomasit tarpeen arvokasvatukselle
 - kuvaile tilanne missä huomasit tarpeen arvokasvatukselle
 - kuvaile tilanne miten vastasit tähän tarpeeseen
 - o mitä arvoja uskot oppilaidesi oppineen/kehittäneen projektin aikana?
 - mistä pääättelet juuri näiden arvojen kehittyneen?
 - miten ne kehittyivät projektin aikana?

PROJEKTIN JÄLKEEN:

- projektin arviointia jäkikäteen
 - o miten oppilaat hyötyvät näistä arvoista, joita he käsittelivät projektissa
 - o oletko tyytyväinen siihen, miten oppilaat pääsivät käsittelemään arvoja projektin aikana? miksi? mitä muuttaisit? mitä lisäisit? mitä ottaisit pois?
 - o huomasitko muutosta oppilaissa projektin aikana suuntaan tai toiseen?
 - o projektin jälkeen huomasitko muutosta oppilaissa?

APPENDIX 2: the interview guide that was provided to the interviewee before the interview.