

FINNISH SCHOOLS ON THE MOVE

R&D PROJECT REPORT

2019



BY Johanna Salmela



Research & Development project concerning the inclusion of students with special needs

Johanna Salmela

Research and Development with Focus on Sport in Society, IV608G, 15 Credits Sport Sciences: Sport in Society, Master's Programme (Two-Year) Semester 3 / Autumn 2019 Date: 2019-11-26 Examiner: Joakim Åkesson



Table of contents

1.	Background	1
	1.1 Introduction	1
	1.2 Problem, Needs, Challenges & Opportunities	3
	1.3 Prioritization	4
	1.4 Purpose & Goals (Project & Impact)	5
	1.5 Project Delimitations	5
2.	Research Methodology	6
	2.1 Research Design/Strategy	6
	2.2 Empirical Data	7
	2.3 Data Collection & Processing	7
	2.4 Data Analysis	8
	2.5 Scientific, Ethical & Social Considerations	8
3.	Theoretical Framework	. 10
4.	Project Plan	. 13
	4.1 Project organization	. 13
	4.2 Project Structure	. 18
	4.2.1 PBS	. 18
	4.2.2 WBS	. 19
	4.2.3 Logical Network	. 21
	4.3 Project Resources	. 22
	4.3.1 Human Resources (competence + time)	. 22
	4.3.2. Time Schedule (Gantt Chart)	. 22
	4.4 Communication	. 24
	4.4.1 Communication Strategy	. 24
	4.4.2. Communication Plan	. 24
	4.5 Risk Analysis	. 26
	4.6 Evaluation Strategy	. 27
	4.6.1 Intervention Theory & Evaluation model	. 27



50
56
63



1. Background

1.1 Introduction

Physical inactivity has become a global public health problem (WHO, 2018a). Schools have an important role in providing and promoting physical activity for children. Children and youth spend a big part of their day at school. Schools can make the children sit down the whole day, but on the other hand, schools have the power to boost the daily physical activity. (Lounsbery, 2017) WHO has made recommendations for physical activity. Children and adolescents aged 5-17 years should be physically active at least 60 minutes, in a moderate to vigorous-intensity, daily (WHO, 2018b). According to Finnish recommendations school-children should be physically active one to two hours a day, and sitting still for more than two hours continuously should be avoided (The Finnish Ministry of Education and the Nuori Suomi sports organization, 2008). However, according to research results from Finland, during a school day, a student accumulates moderate-to-vigorous physical activity 22min in primary schools and 17min in secondary school. Sedentary time is 39min/h in primary school and 46min/h in secondary school. (Tammelin *et al.*, 2015)

Finnish Schools on the Move is a national action programme where the aim is to promote physically active culture in Finnish comprehensive schools. Promoting physical activity among school-aged children consists of increasing physical activity, in addition, decreasing sedentary time. The programme started in 2010 and during the years 2015-2018, it was one of the priority projects in the Finnish government programme regarding knowledge and education. The programme started with 45 pilot schools all over the country. Now more than 90% of municipalities and of comprehensive schools are participating in the programme. The schools and municipalities involved in the programme implement their own individual plans to make school days more physically active. (Finnish Schools on the Move, 2016)



The Finnish Schools on the Move programme is carried out by the Finnish National Board of Education and the Ministry of Education and Culture. The programme has been financed with lottery fundings, and it is coordinated by the LIKES Research Centre for Sport and Health Sciences. (Finnish schools on the Move programme, 2015; Finnish Schools on the Move, 2016) LIKES is conducting scientific research on the physical activity of school children, in addition, monitoring the process of the local Finnish Schools on the Move projects (LIKES, 2019).

Equality is one of the starting points of Finnish Schools on the Move programme (Haapala *et al.*, 2014; Finnish Schools on the Move, 2016; Hentunen, 2019). Every student has the right to be physically active during the school day (Haapala *et al.*, 2014). Equality means that all people are equal regardless of their gender, age, ethnic or national origin, nationality, language, religion or belief, opinion, disability, health, sexual orientation or other personal-related reasons (Ministry of Justice, 2019). Finnish Schools on the Move programme emphasizes that the activities are open to everyone and there should be effort given to enable all students to participate (Hentunen, 2019). Therefore, the inclusion of students with special needs in all activities is highly valued within the programme. Students with special needs can be seen as children and youth with disabilities, children and youth with motor or other learning difficulties, immigrant or linguistic minority background, physically inactive children and youth, or gender-related special needs (Hentunen, 2019).



1.2 Problem, Needs, Challenges & Opportunities

Since the Finnish Schools on the Move -schools implement their own individual plans for increasing the physical activity of school days, they also have the responsibility to take into consideration how to approach the inclusion of students with special needs. According to the results of the surveys regarding the Finnish Schools on the Move programme, it appears that equality is not very highly addressed in everyday actions in schools (Hentunen, 2019). In addition, according to the survey (Hentunen, 2019), municipal coordinators and schools may lack knowledge and tools to pursue equality. Therefore, there is a need for further clarification on how to approach the inclusion of students with special needs within Finnish Schools on the Move programme.

Research and Development questions for the project

- 1. By what concrete practices schools can promote the inclusion of students with special needs for physically active school day?
- 2. How can Finnish Schools on the Move programme develop in its operations with the inclusion of students with special needs?



1.3 Prioritization

The project management triangle (figure 1) represents "product" quality, calendar time, and resources (Tonnquist, 2009). In this Research and Development project, calendar time represents how long the project can run, resources can be seen as project manager's knowledge, competence or labor hours, since there is no money involved or no project group working with the project. In addition, quality equals the level of ambition wanted for the project (Tonnquist, 2009). However, there is a need for prioritization in every project, and the project manager needs to know which factor is the most important for the project (Tonnquist, 2009). In the project management triangle (figure 1), the star illustrates where the prioritization of the project is placed in relation to the quality, calendar time, and resources. In this Research and Development project, calendar time is the most important factor, since the due date defines the project. Quality is also one factor which should be reasonable since working with a "client", in this case, with a sports organization. However, since the prioritization is more head to the calendar time, the project's quality and resources decline.

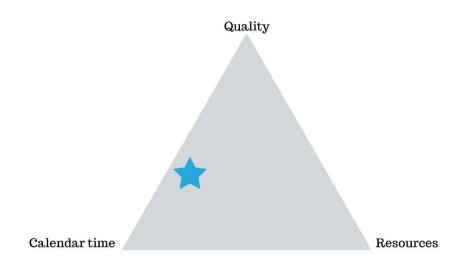


Figure 1. The Project Management Triangle (Tonnquist, 2009, p.58)



1.4 Purpose & Goals (Project & Impact)

Overall, the purpose of the Research and Development project is to further the improvement of the activities of an organization.

Project Goals

The goal of the project is to explore and find solutions on how to approach the inclusion of students with special needs within the Finnish Schools on the Move programme by examining case schools from Finland, Sweden, and Denmark. 1 case/country.

Impact Goals

The objective, also known as an impact goal, of the project is to promote the inclusion of students with special needs within the Finnish Schools on the Move programme. The short-term objective is more of finding tools on how to promote inclusion while the long-term objective is inclusion itself regarding students with special needs within the physical activity programme.

1.5 Project Delimitations

There are several delimiters associated with this Research and Development project. Since the calendar time is limited for the project, time for contacting potential case schools is short. Therefore, only three case schools are taken under investigation (1 school/country: Finland, Sweden, Denmark). To get more knowledge about the topic, it would be needed to collect more data from more case schools, however, the time limits the scope of data collection. In addition, the project's data collection methods need to be able to do from Sweden where the project manager is located, since there are no financial resources involved for traveling to the schools if, for instance, using observation as a data collection method. In addition, the data depends on highly how well the school's contact person has described their practices.



2. Research Methodology

2.1 Research Design/Strategy

This Research and Development project follows a qualitative approach in its research phase. The purpose of the study is to explore how to approach the inclusion of students with special needs for *a* physically active school day. There are two theories guiding the research: contact theory and theory of planned behavior, which both can be applied to seek the factors and approaches to include students with special needs in a physically active school environment. The design to be used in the research is a multiple-case study design since the study is done by examining schools (cases) from Finland, Sweden, and Denmark, 1 case/country. Case study research is an often-used method in Social Sciences and it investigates a real-life situation, helps analyze detailed context and allows the understanding of complex issues (Silverman, 2013; Zainal, 2017). Specifically, this study addresses the following questions:

Research Questions

- 1. By what concrete practices schools can promote the inclusion of students with special needs for physically active school day?
- 2. What factors influence the inclusion of students with special needs?



2.2 Empirical Data

The empirical data was collected from chosen case schools. The goal of the project was to collect data from one case school from each country (Finland, Sweden, Denmark). The purpose of empirical data is to investigate real-life concrete practices on how the school has worked with inclusion regarding physical activity. Case schools' function is to present a brief description of their practices. There are connections made with the stakeholder organizations; Finnish Schools, on the Move, Generation Pep, and Dansk Skoleidræt in order to choose potential case schools for the study. After the case schools have found, the connection is made with the schools' principals for data collection.

2.3 Data Collection & Processing

The data is collected by email interviews, specifically, semi-structured interviews. A semistructured interview-style aim to encourage the respondents to answer personally (Silverman, 2013), and that is needed when the aim of the study is to seek concrete unique practices or stories. However, there are guideline questions provided to the respondents. These guideline questions were partly based on the survey of Hentunen (2019) where it was investigated how Finnish Schools on the Move municipal coordinators had taken equality and inclusion into account in their activities. These questions are provided in English for the Swedish and Danish schools and in Finnish for the Finnish school.

Semi-structure interview (via email), guideline questions:

- Students with special needs might be:
 - Children and youth with disabilities
 - Children and youth with motor learning/other learning difficulties
 - o Immigrants or linguistic minorities
 - Physically inactive children and youth
 - o Gender-related special needs
- Have you focused more on some specific above-mentioned groups (e.g. disabled students)?
- Do you use some kind of "idea-bank" when working with students with special needs?



- Do you have any material already existing that you could share?
- Concrete examples of how you have worked with students with special needs regarding physical activity?

In addition to the collected empirical data, there are a few previous research collected on the topic. The definition of the decision on support in basic education is investigated from each country, moreover, relevant initiatives/projects and documents are collected regarding the topic from each country. After the empirical data (interview descriptions from case schools) and other findings have been collected, data analysis will take a place.

2.4 Data Analysis

Data analysis follows the procedures of thematic analysis. Thematic analysis is used when wanting to identify patterns that arise across a qualitative dataset (Silverman, 2013; Smith and Sparkes, 2016). It has been mentioned that thematic analysis is not tied to a particular theoretical framework (Smith and Sparkes, 2016), however, in the data analysis of the study, the arisen themes are reflected the chosen theories.

2.5 Scientific, Ethical & Social Considerations

Scientific Considerations

The concepts of reliability and validity might be commonly problematic in qualitative research (Silverman, 2013; Smith and Sparkes, 2016). In this Research and Development study, there are several factors that can impair the quality and the rigor of the study. When working with documents and information in languages in which the project manager has lower competence (Swedish and Danish), it lowers the rigor of the study. To ensure credibility, the email interviews will be done in English or in Finnish. In addition, the help of Swedish and Danish student colleagues will be used when investigating documents that are in Swedish and Danish. Moreover, if there are not enough data to process, it might lower the reliability, however, since the design of the study is case study design, it is possible to look these cases as a one, if the data from some planned cases will be missing.



Ethical Considerations

Ethics matter in qualitative research and in the field of social science, especially if there are human individuals involved in the study. Generally used boundaries of research ethics are; "voluntary participation and the right to withdraw, protection of research participants, assessment of potential benefits and risks to participants, respecting the privacy of participants and avoiding deceiving them, obtaining informed consent and avoiding harm". (Silverman, 2013) All the individuals influencing the study are adults, therefore, there is no need for any permission asked from external persons (e.g. guardians). In the emails sent to the stakeholders and the case schools, the purpose and aim of the study, and the project itself are explained, then the responsibility of decision transfers to the recipients if they are willing to be in the study or not. Therefore, no specific consent is used in this project. The descriptions from case schools do not include personal data, therefore, the General Data Protection Regulation (GDPR) does not apply. However, the rules of GDPR should be taken into consideration if any personal data is involved during the research process. (Åkesson, 2019)

Social Considerations

The study is relevant for society as a whole, including communities, groups, and individuals. Equality is one of the goals in societies (United Nations, 2015), therefore, it is needed to find tools on how to include the ones who might not be able to do it without a little help. In addition, it has been identified that schools may need more support on how to pursue the inclusion of students with special needs (Hentunen, 2019). Since this study aims to investigate good practices for Finnish Schools on the Move programme, the results may help communities (schools) and groups (teachers) to find their ways to work more inclusive and by that the individuals might get more equal opportunities to participate.



3. Theoretical Framework

Two theories are guiding the study: contact theory and theory of planned behavior.

Contact theory

Allport's (1954) contact theory states that contact with people different from oneself will lead to attitude change under the right conditions. Moreover, the theory highlights that our stereotypical biases will decrease as we get to know the experiences of others through equal, meaningful, and collaborative contact. Contact theory is especially relevant to adapted physical activity and inclusive education settings. It forms the basis of awareness, supports equitable school culture, and builds the grounds for education intervention programs. There is a value of contact theory when planning for an inclusive environment or physical active culture. Schools have a great opportunity to offer an educational environment where positive and equal contact experiences are created and supported by educational leaders and administrators. (Mckay, 2018, pp.21-25)

There are four components that unpack contact theory; equal status, cooperative pursuance of common goals, personal interactions, and support from authority (Allport, 1954; Pettigrew, 1998; Mckay, 2018). Equal status is considered being the main component. When the group members have equal status, they are less likely to get prejudices toward one another. Contact with cooperative activities rather than competitive activities creates more likely an equal status environment. The types of contacts that lead people to do things together promote changes in attitudes. Personal interactions are essential to get to know one another as individuals. Meaningful contact provides the chance to know one other's actual personality and life experiences, thus, increase a positive attitude towards people who are having for instance disabilities. In addition, changing attitudes relies on support from authority. Contact will have a greater positive effect when it is socially accepted, including laws and norms. (Mckay, 2018, pp.22-23) Working aligns with these components, contact theory can increase positive experiences, create the basis for attitude change, in addition, promote an inclusive culture (Mckay, 2018, p.25). Attitude is one of the key factors to changing behavior, therefore, improved behaviors are essential for adapted physical education and inclusion (Pettigrew, 1998; Mckay, 2018).



Theory of planned behavior

According to the theory of planned behavior, the main antecedent of behavior is the intention of an individual to perform a given behavior. The theory of planned behavior states three determinants of intention; attitude toward the behavior, subjective norms, and perceived behavioral control (figure 2). Attitude toward the behavior refers to a positive or negative predisposition toward the behavior in question. Social factors termed subjective norm refers to perceived social pressure to perform or not to perform the behavior. Moreover, perceived behavior control refers to the perceived ease or difficulty of performing the behavior. (Beck and Ajzen, 1991; Theodorakis, 1995)

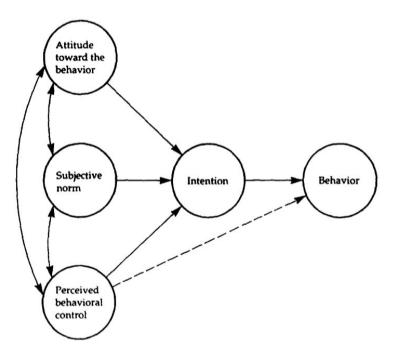


Figure 2. Theory of planned behavior (Beck and Ajzen, 1991)

The planned behavior model has been applied to many studies in the field of sport and physical activity, moreover, studies concerning adapted physical activity. The theory of planned behavior can enable the basis for successful educational interventions. (Theodorakis, 1995) There have been discourses that more positive attitudes toward students with disabilities can create greater success for inclusion (Stewart, 1988; Theodorakis, 1995).



Therefore, these two theories are guiding this research, which seeks the factors and approaches to include students with special needs in a physically active school environment.



4. Project Plan

4.1 Project organization

A project organization is a temporary organization. For instance, a line organization can carry out its own Research and Development by using project style of working when developing new models or ways of practice. Commonly, there is a project manager working with the project group. (Tonnquist, 2009) However, in this Research and Development project, there is no project group, only a project manager working in the process with the help of the project receiver; Finnish Schools on the Move, and with other stakeholders. The project manager role consists of project control, which means mastering project methodologies, structuring, time and resource planning, risk assessment, evaluation, and follow-ups. In addition, leadership skills are needed when working with the project group. (Tonnquist, 2009) There is a need for leadership skills as well when working with the stakeholders, however, since there is no project group in this project, the focus is more on project control.

Stakeholders can be anyone who is somehow influenced by or is influencing the project. It is important for the project manager to recognize the various stakeholders. That can be done by using stakeholder analysis (figure 3). In the stakeholder analysis, the various stakeholders are mapped out and by the arrows, it has been visualized how they affect or are affected by the project. (Tonnquist, 2009) In the stakeholder analysis of this Research and Development project, the "market" illustrates schools and initiatives which are influencing the project but also which can be influenced by the project. The project owner is the only investor in the project, and it invests labor hours into the project. The only real employee of the project is the project manager, however, with the help of contact organization and contact schools, when collecting data. The arrows go in both ways since when the project is done, the organizations and schools may also benefit from the project results. The society represents the general public where societal structures affect the project, in addition, the project's long-term goal is to affect society and inclusion itself regarding students with special needs.

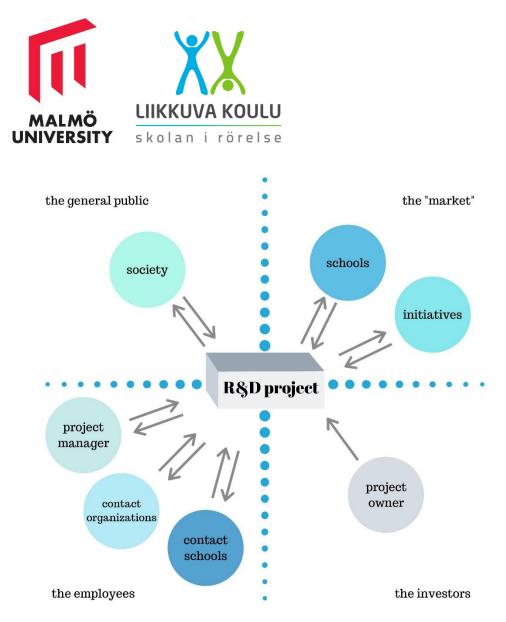


Figure 3. Stakeholder analysis (Tonnquist, 2009, p.47)

Not all stakeholders are equally important to the project. Therefore, stakeholders can be categorized to, for instance, core, primary, and secondary stakeholders. Core stakeholders are the prime movers and decision-makers, primary stakeholders are affected by the project and are influencing the project, in addition, secondary stakeholders who have low interest and impact on the project. (Tonnquist, 2009) Project manager and the receiver organization Finnish Schools on the Move are the core stakeholders, having the power over decisions. In the category of primary stakeholders, there are organizations from each country that are doing the same sort of work as Finnish Schools on the Move. In Sweden, there is an organization called Generation Pep, and in Denmark organization called Dansk Skoleidræt. Under every organization, there are contact persons who have helped to get into connection with the potential case school, and under every case school found, there are contact persons from the school.



This illustration (figure 4) helps to view all the stakeholders and organize the complexity of having many people influencing the project. In addition, in the project closure phase when it is time to thank the stakeholders being involved in the project, it is easier to come back to the stakeholder map to see all the people who have been influencing the project.

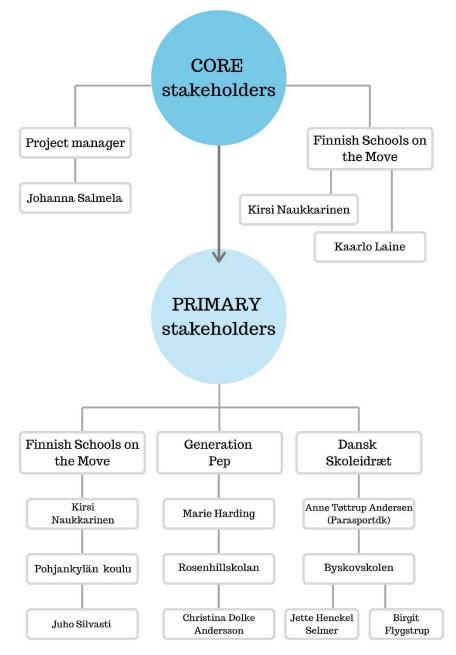


Figure 4. Stakeholder map (original version, changed several times during the process)



Finnish Schools on the Move

Finnish Schools on the Move is a national action programme where the aim is to promote physically active culture in Finnish comprehensive schools. Promoting physical activity among school-aged children consists of increasing physical activity, in addition, decreasing sedentary time. The schools and municipalities involved in the programme implement their own individual plans to make school days more physically active. (Finnish Schools on the Move, 2016) The Finnish Schools on the Move programme is carried out by the Finnish National Board of Education and the Ministry of Education and Culture. The programme has been financed with lottery funding, and it is coordinated by the LIKES Research Centre for Sport and Health Sciences. (Finnish schools on the Move programme, 2015; Finnish Schools on the Move, 2016; LIKES, 2019) LIKES is conducting scientific research on the physical activity of school children, in addition, monitoring the process of the local Finnish Schools on the Move projects (LIKES, 2019).

Generation Pep

Generation Pep is a non-profit organization working with the vision that all children and youth in Sweden should have the ability and desire to live an active and healthy life. Generation Pep spreads knowledge and engages people and organizations to make an effort to promote a healthy life for children and youth. Generation Pep desires to involve the whole community to the actions, from local people to policymakers. The organization is initiated by the Swedish Crown Princess Couple. (Generation Pep Sweden, 2019a) The work of Generation Pep is based on the evidence-based manual on Physical Activity in Disease Prevention and Disease Treatment; FYSS (Yrkesföreningar Fysisk Aktivitet, 2019) and the Nordic Nutrition recommendations (Nordic Council of Ministers, 2012). Founding partners, knowledge partners, and supporting partners are making the work of Generation Pep possible. Founding partners are the co-founders and financier of Generation Pep, knowledge partners contribute knowledge in their areas of expertise, in addition, supporting partners work pro bono and support Generation Pep in their respective areas of expertise. (Generation Pep Sweden, 2019c)



Dansk Skoleidræt

Dansk Skoleidræt (Danish School Sport) is a nationwide sports organization aiming to promote health, learning, and well-being through sports, play and movement for all students at school (Dansk Skoleidræt, 2019d). The mission of Dansk Skoleidræt is to be known for influencing the Danish schools by creating schools that create the best effort for physical, emotional, and innovative movement for all children (Dansk Skoleidræt, 2019c). The organization works in collaboration with the country's schools with the support of TrygFonden and Nordea-fonden, among others. As the only organization in Denmark, Dansk Skoleidræt is firmly rooted in both the school world and the sports world. Moreover, the organization activates students throughout Denmark every day; pupils in ordinary primary schools, pupils in private schools, or in special schools. Dansk Skoleidræt also focuses on developing the competence of teachers and educators, in addition, contributing the development of a school environment where 45 minutes of daily physical exercise is made possible and where physical activity is always rooted in common goals. (Dansk Skoleidræt, 2019d)



4.2 Project Structure

4.2.1 PBS

Complex product or process is recommended to break down to smaller units into so-called Product Breakdown Structure (PBS) (Tonnquist, 2009). Units that have been identified to be relevant for this Research and Development project are; Identify a problem, Planning, Previous Research, Theory, Research, Solution, and Evaluation (figure 5). Each unit has more detailed requirements.

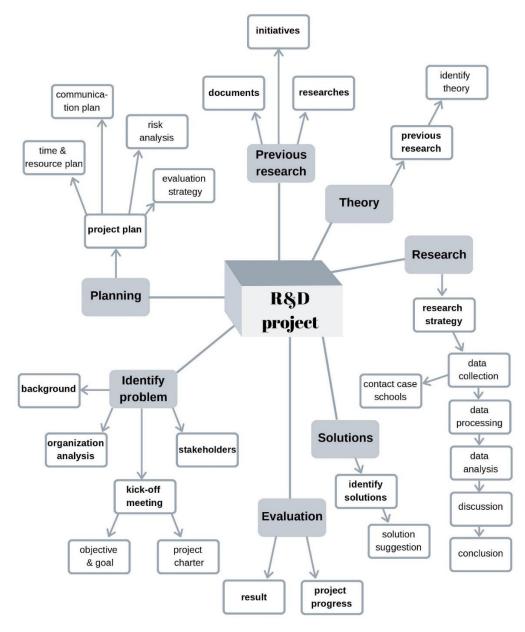


Figure 5. Product Breakdown Structure (PBS) (Tonnquist, 2009, p.65)



4.2.2 WBS

Once the project has been broken down into smaller units, it is possible to form so-called Work Packages (WP), which is the lowest level of Work Breakdown Structure. A Work Package may consist of one or several activities, however, in this phase, it does not show dependencies between activities. (Tonnquist, 2009) Based on the smaller units, there have been identified 7 Work Packages (WP 1-7), in this Research and Development project (figure 6).

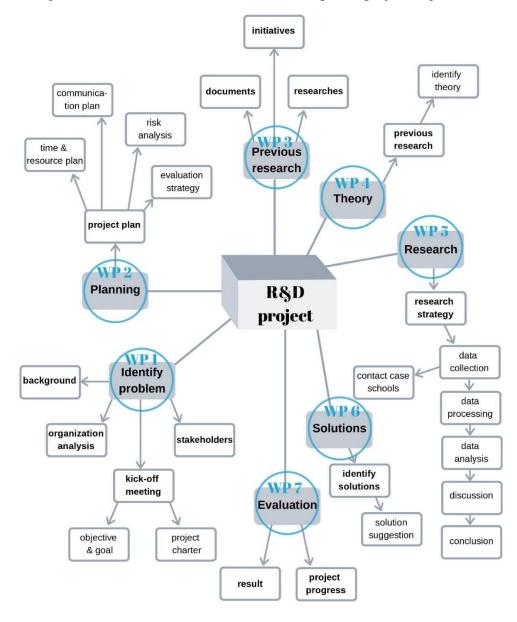


Figure 6. Work Package method (WP) (Tonnquist, 2009, p.117)



Work Breakdown Structure (WBS) is a technique for defining and organizing the total scope of a project. WBS is formed based on the created Work Packages (WP) and it facilitates the work of identifying milestones and planning activities. Commonly a Work Package is broken down into several activities that are needed to achieve the result. (Tonnquist, 2009) In the Work Breakdown Structure of this Research and Development project, the Work Packages have already been placed in the chronological order from WP 1 to WP 7, in addition, under each Work Package, there are all the activities required (figure 7).

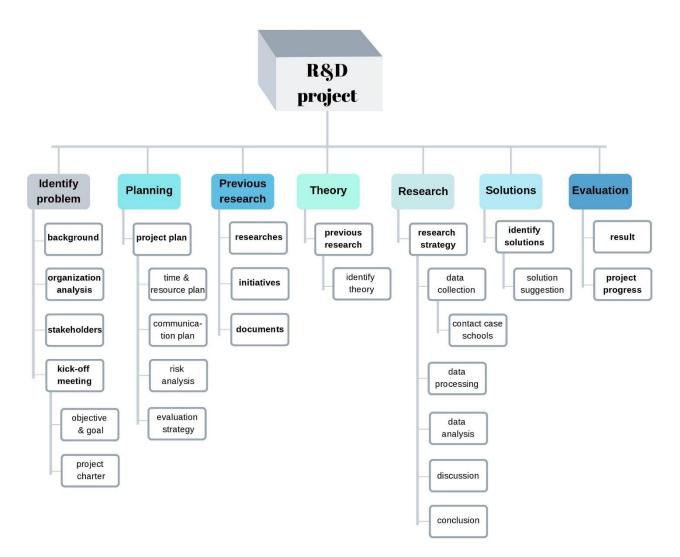


Figure 7. Work Breakdown Structure (WBS) (Tonnquist, 2009, p.41)



4.2.3 Logical Network

Logical Network is needed when identifying dependencies and chronological order between the Work Packages. Work Packages that are not dependent on each other can be organized parallel in the Logical Network diagram. (Tonnquist, 2009) In the Logical Network diagram of this project (figure 8), is has been illustrated that Identify a problem (WP 1) and Planning (WP 2) can be done at the same time and those are not dependent on each other. However, to be able to move forward, those Work Packages (WP 1 & WP 2) need to be done. Therefore, there will be a milestone after WP 1 and WP 2. The milestones define what needs to be done before moving to the next activities (Tonnquist, 2009). Once the first milestone is reached, it is possible to move on to Previous Research (WP 3), Theory (WP 4), and Research (WP 5), which can run in parallel. There will be another milestone after WP 3, WP 4, and WP 5. It is possible to start working with the Solutions (WP 6) after achieving the second milestone. After WP 6 comes the third milestone, therefore, once it has been achieved, it is possible to start the Evaluation (WP 7) of the project.

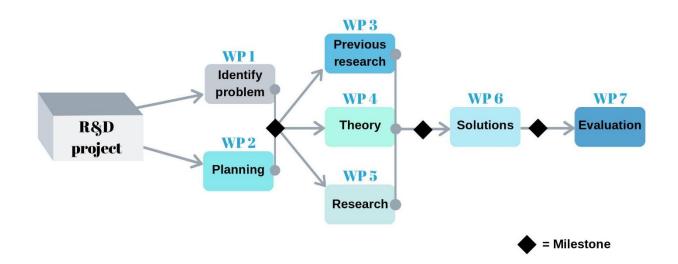


Figure 8. Logical Network (Tonnquist, 2009, p.114)



4.3 Project Resources

Commonly there is limited time for a project and based on that given period of time, a project needs a certain amount of recourses. A resource can mean people, equipment, materials, time, or money. (Tonnquist, 2009) Since this project is carried out by one person, the only resource is a human resource, in this case, the project manager's competence and time.

4.3.1 Human Resources (competence + time)

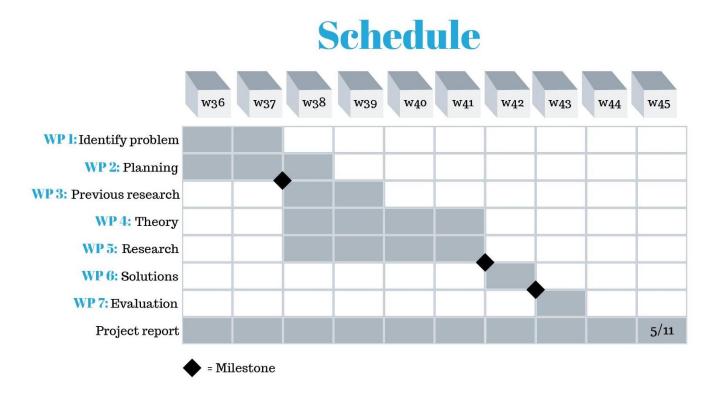
Competence, which indicates the capacity to utilize the knowledge in a certain area, can be considered as one of the project resources (Tonnquist, 2009). Since there is no project group involved, the competence resource comes from the project manager's previous experiences and education, and from the lessons learned during the process. With a project group, it could have been possible to use different competencies of individuals. Moreover, as has been identified, the project manager is the only human resource carrying out the project, however, with the help of the stakeholders. The calendar time given to the project defines the duration of the project. In addition, time as a resource can be seen as labor hours utilized in the project (Tonnquist, 2009). Calendar time is a determinant factor for the project, since working with the organizations it always takes calendar time for contacting the organizations and get the response. Therefore, even with more labor hours, the project would not be completed any faster and that needs to be considered.

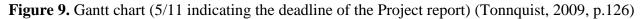
4.3.2. Time Schedule (Gantt Chart)

Since time is the most important factor in this project, a well-planned time schedule is essential for the success of the work. The Gantt Chart is a visual activity plan with a time axis, and where the activities are illustrated as horizontal bars. There are several phases when creating a Gantt Chart, starting from establishing the project's objective and goal. The next step is to create Work Breakdown Structure (WBS scope) (figure 7), then based on the WBS, Logical Network (figure 8) will be formed to illustrate the project flow by activities and milestones. When placing the activity list in horizontal bars, it is possible to place the time axis in place as well. (Tonnquist, 2009)



In the project's time schedule (figure 9), it has been illustrated the activities in relation to time. The allotted time for the project is 10 weeks, from week 36 to week 45 (time axis w36-w45). Work Packages (WP) represent the activities that need to be carried out. When reading the schedule, it is possible to see what is needed to be done each week and when it is needed to move on to the next activity. Some activities can run parallel. By following the time schedule, the project will keep its pace, and ensure that it will be completed on the due date. In the time schedule (figure 9), writing the project report will be ongoing the whole time and in week 45 the date 5/11 indicates the deadline of the project report.







4.4 Communication

4.4.1 Communication Strategy

The purpose of the communication strategy is to achieve communication objectives for all stakeholders so that everyone is aware of the status of the project. One of the project manager's tasks is to manage stakeholders and it is done by communicating. An open and friendly approach in communication helps in working with the stakeholders. In addition, the message needs to be clear enough when wanting a response from the receiver. (Tonnquist, 2009) Communication plays a major role in this project since there are many stakeholders (organizations and contact persons) and the data collection is highly dependent on their responses. Therefore, communication has to be opened from the beginning of the project since commonly it takes calendar time to get the response. Moreover, the messages need to be kind but at the same time straightforward in order to receive the response within the due time.

4.4.2. Communication Plan

Communication plan is a tool that ensures that, for instance, the right target stakeholder will get the right information, in the right way, and on time. The risks are minimized by planning the flow of communication. The plan contains information which needs to be shared, in addition, the information which needs to be collected. (Tonnquist, 2009) According to the communication plan of this project (table 1), most of the communication will be done via email due to geographical distances. The kick-off meeting with the receiver organization will be done via Skype, and the oral presentation will be held at Malmö University, Sweden.



	who? -receiver	why?	what?	how?	when?	who? -responsible
\rightarrow	Finnish Schools on the move	Establish the project	Identify a problem & Project plan	Kick-off meeting	Project initiation	Project manager
\rightarrow	Project manager	For data collection	Case school from Finland	by email	Research phase	Finnish Schools on the move
\rightarrow	Project manager	For data collection	Case school from Sweden	by email	Research phase	Generation PEP
\rightarrow	Project manager	For data collection	Case school from Denmark	by email	Research phase	Dansk skoleidræt / Parasport Danmark
\rightarrow	Finnish Schools on the move	To show the progress of the project	Progress Report	by email	Mid-phase of the project	Project manager
\rightarrow	Finnish Schools on the move & Malmö University	To show what the project has accomplished	Project results	Final Project report	5/11/2019	Project manager
\rightarrow	Finnish Schools on the move & Malmö University	To show what the project has accomplished	Oral presentation of the project	Oral presentation seminar	7/11/2019	Project manager
\rightarrow	Finnish Schools on the move & Generation PEP & Dansk skoleidræt / Parasport Danmark & case schools	To thank the stakeholders and share the knowledge	Project results	by email	Project closure phase	Project manager

Table 1. Communication plan (original plan) (Tonnquist, 2009, p.167)



4.5 Risk Analysis

In every project, risk management is essential to ensure that the project will reach its goals respite the variables. To identify possible risk events, brainstorming is an excellent technique to be used. Mini risk method has been used as a tool to analyze the possible risk events in this project (table 2). Probability and impact are rated on a scale from one to five, where one is the lowest and five the highest. Risk value will be calculated by multiplying probability with impact. The risk value will give the direction if it is critical enough to get a risk response. If any identified risk event actually occurs, there will be a strategy on how to deal with it, which ensures the success of the project. (Tonnquist, 2009) In the mini risk analysis of the project (table 2), the most critical risks have been identified and risk responses have formulated from each Work Package (WP).

	Risk	Probability 1 to 5	Impact 1 to 5	Risk value P x I	Risk response
WP 1	Project manager lacks experience / knowledge on the topic	3	3	9	Pre-studying and getting in contact with a specialist if needed
WP 2	Too short calendar time for the project	5	4	20	Well planned time management plan & schedule in advance + prioritizing
WP 3	Language barriers (Swedish & Danish)	4	3	12	Seek for help from Swedish & Danish student colleagues + set delimitations
WP 4	Difficulties in finding relevant theories	3	3	9	Seek for help from professors & student colleagues + from previous research
WP 5	Quality of data (case schools do not respond in time)	4	5	20	Data collection from previous research / initiatives / material banks
WP 6	Solutions to the problem not found	1	5	5	Seek for help / ideas from the stakeholders (organizations working on the topic)
WP 7	Lack of time for comprehensive evaluation	3	3	9	Well planned time management plan & schedule in advance

Table 2. The Mini Risk Method (Tonnquist, 2009, p.151)



4.6 Evaluation Strategy

The project manager is responsible for the closing phase of the project. In this phase, evaluation takes place, where the project result, in addition, the project process will be evaluated. Evaluation is an essential part of developing future projects by learning from previously executed projects. At the end of the project, it is possible to examine if the project goal is reached, however, it might be too early to see if the impact goal has been met. Moreover, process evaluation gives essential information if the planned activities ran smoothly or not. (Tonnquist, 2009) According to Tonnquist (2009), a project should be analyzed, measures, and evaluated from every possible angle. However, the strategy for evaluating this Research and Development is to focus more on one specific phase of the project. The phase to be evaluated is the project Results and Analysis (chapter 5 in project report). Moreover, the time consumption of the project will be discussed.

4.6.1 Intervention Theory & Evaluation model

Intervention theory is concerning with the evaluation of social and organizational programmes or interventions. There will be examined if the intervention has achieved its goals. (Bryman, 2012) In the evaluation model, one part of the project will be addressed. There are different phases in the project as input, process, and outcome. In this Research and Development project, the most relevant phase to be evaluated is the process, how well it went in comparison with the planned activities and milestones.



5. Results, Analysis, Discussion & Conclusions

5.1 Results & Analysis

The results of the study are organized in two sections. The chapter begins with a brief Literature review (previous research) on the topic, followed by Other results, which consists of the Definition of the decision on support in basic education, Initiatives/Projects, Documents, and the Cases. The purpose of the above-mentioned sections has been to discover relevant findings on the topic from each country. Finally, the result section is followed by Analysis, Discussion, and Conclusions.



5.1.1 Literature review (Previous Research)

Several studies show that inclusive practices in Physical Education (PE) has been difficult to implement since the teachers may lack the competence needed. In the study of Mcgrath, Crawford and Sullivan (2019), interviewed teachers had a good attitude towards inclusion, however, according to their experiences, the word "challenge" appeared in the context. In addition, the teachers in the study felt that teacher education lacks both; theory but also praxis in relation to inclusion and PE. Attitudes have been identified as one factor which has an effect. When the competence to initiate something is low, the attitudes towards the activity might be negative. (Mcgrath, Crawford and Sullivan, 2019) According to the study of Belley-Ranger *et al.* (2016), PE teachers indicated some determinants which foster participation in sports and physical activity among youth with disabilities. Two main determinants identified were the school environment and professional skills. It has been noted that motivation towards physical activity increases with increasing participation in physical activity. Moreover, there should be more emphasis given to knowledge sharing between practitioners. (Belley-Ranger *et al.*, 2016)

According to Jin, Yun and Agiovlasitis (2018), there is a connection between the enjoyment in PE/recess time physical activity and the participation of daily physical activity. Children who enjoyed PE or recess time physical activity more had a higher intention to participate in physical activity in general. This applies also among students with disabilities. Therefore, physical educators should provide enjoyable opportunities during PE classes/recess for students with special needs as well. (Jin, Yun and Agiovlasitis, 2018) Students who have limitations with their medical state may face a lack of quality in physical education, and in the worst case get socially isolated (Kudryavtsev *et al.*, 2019). In the study of Kudryavtsev *et al.* (2019), the implementation of the inclusive learning model of students with physical disabilities in physical education was examined. The emphasis should be on an individual approach, in addition, the students with disabilities should have a feeling of being socially included. Finally, it has been expressed once again that training teachers and specialists should be improved. (Kudryavtsev *et al.*, 2019)



5.1.2 Other Results

Definition of the decision on support in basic education

Finland

Many children need support for their learning. Under the Finland Basic Education Act, a student has the right to receive guidance and adequate support for learning throughout basic education. The three levels of support for learning are; general, enhanced, and special. General support is the first way to respond to the need for support of a student. This usually means individual pedagogical solutions, moreover, guidance and support. General support is provided as soon as the need arises, and there is no need for a specific decision to start the support. As the need for support increases, the student should receive enhanced support. Enhanced support is more continuous and personalized support of a student's learning and education. The initiation of enhanced support will be dealt with in a multidisciplinary manner, in cooperation with pupil welfare professionals and based on a pedagogical assessment. Cooperation and systematic approach are the prerequisites for enhanced support. (The Finnish Ministry of Education, 2011, 2019)

If the enhanced support given is not sufficient to help the student cope with schoolwork, there will be made an administrative decision on special support based on a pedagogical assessment. A personal education plan will be prepared for the student, which indicates the provision of teaching and other support. Furthermore, the support of a guardian, individual guidance, and multidisciplinary collaboration are essential factors. (The Finnish Ministry of Education, 2011, 2019) Every student has the right to be physically active at school. Inclusion, a school open to all thought, and the three levels of elementary school learning support can be applied from the perspective of physical activity (Haapala *et al.*, 2014). Forms of support can include, for instance, educational support, part-time special education, assistant services, in addition, aids and appliance for disabled (The Finnish Ministry of Education, 2019).



Sweden

Swedish Education Act also emphasizes the importance of support in basic education. The support can be in the form of extra adjustments within the framework of regular teaching or in the form of special support. After several attempts to adapt the teaching, conversation with the student and parents, and advice from colleagues, support measures may become relevant. Scope and duration of the efforts distinguish extra adjustments from support provided in the form of special support. Support in the form of extra adjustments can be implemented in many ways, for instance, by making a special schedule for the school day, adapted teaching materials, and individual educational efforts. There are no formal decisions needed for making extra adjustments for a student. (Skolverket, 2016)

Special support becomes necessary when the student's need for support is more extensive and longer-lasting. Special support can be implemented, for instance, by providing regular special educational efforts, adapted plans for education or placement in a special teaching group. The school must conduct an investigation before deciding to provide special support. (Skolverket, 2019) In regards to disabilities, according to the Government's strategy for the implementation of disability policy, school authorities are expected to contribute to disability policy work in the school sector where the strategy is based on three focus goals. One is to improve the accessibility for students with disabilities, another is that every student should be given the conditions to develop their knowledge, and the last goal is that the knowledge about disabilities and how the teaching can be designed according to each student's needs, should be improved. (Skolverket, 2016)



Denmark

In Denmark, primary school students whose development requires special considerations and support for at least nine hours per week may receive support within basic education, in special classes, or in special schools. The principal of the school decides whether a student can receive special education at the school. The decision is made by following an educational-psychological assessment and in consultation with the student and the parents. The special education is part of the special educational assistance in primary school, which includes for instance, special educational advice for parents, teachers or others whose effort have impact on student development, special teaching material and technical aids, special working methods regarding to the special needs, personal assistance, in addition, specially designed activities. (Ministry of Children and Education, 2019b) The regulations of the Folkeskole Act and the related regulations apply to students who receive special education in a regular class, in special classes, or in special schools, unless the regulations on special education are allowed to derogate from the rules. (Ministry of Children and Education, 2019b)

Dansk Skoleidræt and Det Centrale Handicapråd state that sports and movement in primary school are for all students, whether for instance, they sit in a wheelchair, are blind, have ADHD, autism, or just having difficulties with sports. With planning, thoughtfulness, creativity, and will, it is possible to make an inclusive environment for physical activity and education. (Dansk Skoleidræt, 2019b) As the Folkeskole Act states, everyone has the right to be included in the social community that sports education forms (Ministry of Children and Education, 2019a; TIBIS, 2019a) Sport education must be organized and adapted in the way that it allows full participation for all students. Responsibility for inclusion rests with both teachers and the student group with and without disabilities. The goal for all students is inclusion and full participation in physical activity and education, where everyone is recognized as an equal person and part of the class communities. (TIBIS, 2019a)



Initiatives/Projects

Finland



"Iloon yli esteiden" ("Come across the obstacles and find the joy") is a Finnish initiative where the goal is to increase opportunities for all pupils to participate in physical activities during the school day. The initiative was implemented by Valteri Centre for Learning and Consulting and funded by the Finnish National Agency for Education. Partners of the project were the University of Jyväskylä and VAU Association for Disabled Sports and Exercise. The initiative is a part of the Finnish Schools on the Move programme. The initiative has been organizing event days tailored to the needs of the schools with the aim of providing suggestions on more physically active school days, moreover, there has been made an idea bank compiled of good practices from these event days. The idea bank has a collection of proven exercise tips that allow for equal participation for school physical activity and functional education. The suggestions are divided into four sections; Open, Applied, Parallel, and Separate. The initiative, which started in 2018, will continue, and the idea bank will be updated during the second project period. (Haapala *et al.*, 2014; Finnish Schools on the Move, 2018; Iloon Yli Esteiden, 2018)



Sweden



Special Olympics School Day is a sports day adapted for the special schools, where students get an opportunity to try out different sports. The project started in spring 2015 with the ambition to implement 30 Special Olympics Schools days before summer 2016, however, it passed the goal already at the end of the year 2015. The project aims to offer students with developmental disabilities an opportunity to try out sports diversely. The Special Olympics School Day can include everything from swimming and basketball to all other sports. The events are done by a collaboration between local schools, sports associations, and Special Olympics Sweden. The schools and associations host the day together, and Special Olympics Sweden stands for the framing with t-shirts, medals, and branding. (Parasport Sverige, 2019; Special Olympics Sweden, 2019) In addition, the aim of the day is to organize a day where students get to meet representatives from the local sports associations and are introduced to the sport in a simple and fun way. The sports day takes place during school hours where the students get to try out various sports with the ambition of continuing the sports hobby. (Parasport Sverige, 2019)



Denmark

Tilpasset Idræt og Bevægelse i Skolen (TIBIS)

TIBIS is a project focusing on the inclusion of children and youth with disabilities in physical education (PE) and the sports exam. The aim of the project is to ensure the participation of all students in elementary school physical education. TIBIS has a particular focus on how PE teachers can accommodate students with physical and mental disabilities. On the website of TIBIS, there are guides, educational courses, and inspiration for how individuals, schools or professionals can work specifically to include students with disabilities in the school's physical education. The project is funded by the Ministry of Education. The funds will be used to develop several concrete didactic and special educational solutions and tools that support already existing practices. TIBIS works in collaboration with many stakeholders (table 3), for instance with Byskovskolen. (TIBIS, 2019c, 2019b)



Table 3. Collaboration partners of TIBIS (TIBIS, 2019b)



Documents

Finland

One of the outputs of the "Iloon yli esteiden" -initiative was an idea bank, where suggestions for equal participation in the physical activities of the school were provided. The suggestions are divided into four sections; Open, Applied, Parallel, and Separate.

In Open activities, everyone participates in the same game where the activity suits for everyone (figure 10). (Finnish Schools on the Move, 2018; Valteri Centre for Learning and Consulting, 2018)



Figure 10. Example of Open activities, "Own side clean" -game (Valteri Centre for Learning and Consulting, 2018)



In Applied activity, there is a common theme or exercise, however, different implementation methods are used (figure 11). (Finnish Schools on the Move, 2018; Valteri Centre for Learning and Consulting, 2018)



Figure 11. Example of Applied activities, applications for throwing basketball (Valteri Centre for Learning and Consulting, 2018)

In Parallel activities, the theme or exercise may be common, but everyone is practicing on their own level, for instance, using different performance options (figure 12). (Finnish Schools on the Move, 2018; Valteri Centre for Learning and Consulting, 2018)





Figure 12. Example of Parallel activities, Parkour -track using two different tracks in parallel (Valteri Centre for Learning and Consulting, 2018)

In Separate activities, peer exercise groups can act as a low-threshold starter to exercise, for instance, disability sports and applied physical activity training groups are Separate activities (figure 13). (Finnish Schools on the Move, 2018; Valteri Centre for Learning and Consulting, 2018)



Figure 13. Example of Separate activities, Junior Games for disabled children and young people with special needs (Finnish Sports Association of Persons with Disabilities, 2019)



Sweden

Generation Pep Sweden (2019b) has an inspiration bank on their webpage. By filtering the activity list, it is possible to find activities that suit all (figure 14). In addition, it is possible to share your own good practices or cases, including photos from the activities.



Rörelseglädje för alla

Figure 14. "Movement joy for everyone" -activity tip from inspiration bank (Generation Pep Sweden, 2019b)



Denmark

The checklist of Dansk Skoleidræt (2019a) is a helpful tool when preparing sports lessons that include all children. The checklist aims to ensure that all children are activated, attain learning, and experience that sports are fun. (Dansk Skoleidræt, 2019a) The seven steps in the checklist are; Get to know the student – communication with the colleagues (figure 15), Get help with guidance (figure 16), Have a meeting with your leader (figure 17), Discuss with the team (figure 18), Cooperation with parents (figure 19), Organize a joint parent meeting (figure 20), and Planning of Physical Education (figure 21).



Figure 15. Get to know the student – communication with the colleagues (Dansk Skoleidræt, 2019a)



Figure 16. Get help with guidance (Dansk Skoleidræt, 2019a)





Figure 17. Have a meeting with your leader (Dansk Skoleidræt, 2019a)



Figure 18. Discuss with the team (Dansk Skoleidræt, 2019a)



Figure 19. Cooperation with parents (Dansk Skoleidræt, 2019a)





Figure 20. Organize a joint parent meeting (Dansk Skoleidræt, 2019a)



Figure 21. Planning of Physical Education (Dansk Skoleidræt, 2019a)



Flygstrup, Selmer and Soulié (2018) have identified in their book that inclusion in physical education may be challenging for many teachers. Therefore, there is a need for good advice on how students with disabilities can participate in physical education classes. ALLE TIL IDRÆT ("All for PE") is a guidebook to creating inclusive physical education in primary schools. Moreover, the book includes concrete activities with adaptations for $1^{st} - 9^{th}$ graders (figure 22). (Flygstrup, Selmer and Soulié, 2018)

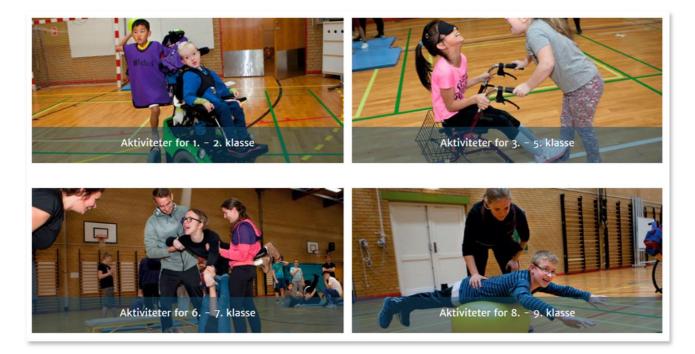


Figure 22. Concrete activities with adaptations $1^{st} - 9^{th}$ grade (Flygstrup, Selmer and Soulié, 2018)



CASE 1a: Pohjankylän koulu, Kalajoki (Finland)



Background

Pohjankylän koulu (School of Pohjankylä) is the largest primary school in the city of Kalajoki, Finland. The school has approximately 369 students and several special classes. In addition, the school provides morning and afternoon activities for 1-2 graders. The city of Kalajoki participates in the national Finnish Schools on the Move programme, which means that every elementary school in Kalajoki will promote physical activity during school hours by encouraging students to move during the school day and providing inspirational activities. The goal is to create more comfortable school days and well-being students. In addition, there are elite athletes supporting the Finnish Schools on the Move programme in Kalajoki; Tuomo Himanka, world champion in wheelchair racing and Jussi Jokinen, an NHL hockey player (figure 23). Moreover, it has been highlighted that there is power in collaboration. In addition to the school staff, there is a great number of other stakeholders involved in promoting the well-being of the students. (Kalajoen kaupunki, 2019; Peda.net, 2019)



Figure 23. Tuomo Himanka, world champion in wheelchair racing and Jussi Jokinen, an NHL hockey player (Kalajoen kaupunki, 2019)



Empirical data

Pohjankylän koulu was chosen to be one of the case schools for the research and development project. A brief description was obtained from the school; how the school has approached the inclusion of students with special needs regarding physical activity during school days (Silvasti, 2019). According to the description made by the principal Juho Silvasti and a teacher working in the special class, the schoolyard has been made appealing to all children. The multi-functional playground offers activities for all ages. Moreover, it has been designed with the students' thoughts and involvement (figure 24). (Silvasti, 2019)



Figure 24. Students' involvement in designing the schoolyard (City of Kalajoki, 2017)

In special classes, where everyone is diagnosed with a disability, already made programs are used, for instance, "KKK-maharumpu", exercise Christmas calendars, and break exercise video clips. The teacher working in the special class highlight that students in the classroom need clear guidance. In addition, some good practices have been identified, for instance, the special class has regular walks on a daily basis. The students in special classes are often inactive during their leisure time, which means that the daily amount of physical activity consists highly of the activity during the school day. Students are encouraged to prefer active transportation when changing location. (Silvasti, 2019)



CASE 1b: Repokankaan koulu, Varkaus (Finland)



Background

Repokankaan koulu (School of Repokangas) is a primary school for 1st to 6th graders, located in Varkaus, Finland. Moreover, the mission is to operate as a school supporting students with special needs. The vision of the school is to promote wellbeing and equality by providing high-quality education, in addition to developing work models on the three levels of support for learning; general, enhanced, and special support. Repokankaan koulu was one school participating in the Finnish Schools on the Move programme pilot phase. In the school's Academic calendar 2019-2020, it has highlighted that Finnish Schools on the Move programme is well-established in the school's activities. In addition to PE classes, there is physical activity included in the school day for each student. Functional learning, variable, learner-centered, learner-active and collaborative education methods are Finnish Schools on the Move programme's ways of operating. The technical department of the city operates as a partner in the development of the school environment. Moreover, parents are encouraged to travel to school with their children on foot or by bicycle. (Repokankaan koulu, 2019)

Repokankaan koulu was participating in the Finnish Schools on the Move programme, focusing on activities for students with special needs. There were several good practices identified during the pilot phase. Teamwork was one of the identified factors, when having more teachers, trainers, or other adults with a group, it is possible to implement parallel activities better for everyone's level. Other good practices were less talking and more operating instructions in pictures, having more space in classrooms to be able to move around, using gym balls as seats to get work in classes in different positions, using "exercise of the week"; exercise which is done as snacks throughout the day, using "I help" as a norm; diversity becomes wealth when one can help another, when selecting equipment shall take into account the needs of persons with reduced mobility or disability, and finally, using "improve motor skills" -exercises during the school day. (Haapala *et al.*, 2014)



Empirical data

Repokankaan koulu was another case from Finland under the investigation for the Research and Development project. Therefore, a brief description was obtained from this school as well; how the school has approached the inclusion of students with special needs regarding physical activity during school days. One of the teachers, working with the topic, provided a list of good practices. The description was sent via e-mail by the principal Eriikka Laukkanen (Laukkanen, 2019). According to the description, the schoolyard has been made more multi-functional during the pilot phase by constructing the school environment with a variety of equipment for physical activity, for instance, pan arena, balance beams, spinning tops, and frisbee golf baskets. In addition, functional paths and action stations have been painted on the asphalt in the schoolyard. Various inspirational paths have been made by taping the interior floors. These modifications from the pilot phase are still available to all students. (Laukkanen, 2019)

The activities of Finnish Schools on the Move programme have been largely maintained also regarding students with special needs. There is a focus on students with special motor skill needs. Small groups include assistants, in addition, personal assistants, who assist and seek to develop student's motor skills. Moreover, there is a so-called "mopa" -gymnastics for students who need motor support and development in this area. Each teacher uses active teaching methods during lessons, including exercise breaks. In particular, active play related to mathematics has been found to promote learning. Especially smaller students with special needs become more and more enthusiastic about activities where play is at the focus and the physical activity has built around it. In PE lessons of small groups, there are a lot of exercises that support motor skills and the school has a variety of equipment to support the teaching. In addition, the school aims to integrate physical activity with other school subjects and encourages walking or cycling wherever possible. Laukkanen indicates that in the classrooms, students who have problems with concentration are taken into consideration by giving them the choice to choose a big gym ball instead of a chair. (Laukkanen, 2019)



CASE 2: Rosenhillskolan, Huddinge (Sweden)



Background

Rosenhillskolan is a unique school for unique needs, located in Huddinge municipality, Sweden. The school is specialized in meeting students in need of special support and consists of the following units: Linden, Sjukhusskolan, and Special Education groups (SU groups). Linden is Rosenkillskolans primary school for students with intellectual disabilities and autism, in addition, the new unit for students with multifunctional variations and intellectual disabilities. Sjukhusskolan is for students enrolled in care at Karolinska University Hospital in Huddinge. SU groups are municipal teaching groups, for instance, groups are organized centrally in the municipality, where students receive their teaching and their need for special support. The ambition of Rosenhillskolan is to become a learning center for special education in focus; teach, develop, and raise children who have great challenges with them in life. (Huddinge, 2019)

Empirical data

Rosenhillskolan was chosen to be the case school from Sweden for the Research and Development project recommended by Maria Harding from Generation pep. However, in the contact (via e-mail) with the school principal Christina Dolke Andersson, it turned out that the teacher specializing in the topic was on sick-leave, therefore the empirical data from the case school, Rosenhillskolan, was missed out.



CASE 3: Byskovskolen, Ringsted (Denmark)



Background

Byskovskolen is a primary school located in Ringsted municipality, Denmark. Byskovskolen consists of three different schools, all located in Ringsted (Byskovskolen, 2019). The school has wide student composition, some have no disabilities, some have cognitive disabilities, and some have physical disabilities (Tøttrup Andersen, 2019). Therefore, the school has ordinary classes and special classes, however, in PE they have lessons together (Soulié, 2019). In addition, Byskovskolen has an anti-bullying strategy "STOP-MOB" to prevent bullying, which is especially important when working with children with special needs. The purpose of the strategy is to ensure that Byskocskolen is a safe place where students thrive, and actively participate in teaching. The strategy aims to prevent bullying and provide tools to deal with bullying where it occurs. (Byskovskolen, 2018)

Empirical data

Byskovskolen was chosen to be the case school from Denmark for the Research and Development project recommended by Anne Tøttrup Andersen from Parasport Danmark and Tine Soulié from Videnscenter om handicap. Birgit Flygstrup, teacher specialized in the area in Byskovskolen, responded (via e-mail) that most of the knowledge they have and practices they are using with students with specials needs are written down in their book "All for PE" (Flygstrup, Selmer and Soulié, 2018). Flygstrup provided an opportunity to come to visit the school to see their ways of working in action. However, since the recourses for the project were limited, it was not possible to implement the school visit in this Research and Development project. Therefore, the empirical data from the case school, Byskovskolen, was missed out.



5.2 Analysis

The analysis follows the procedures of thematic analysis, where patterns that arise across the dataset will be identified. By this, it is possible to see the good factors and practices that have been discovered. However, the practices that do not appear in every dataset are important since that type of data is also needed when trying to explore something new. In addition, the arisen themes are reflected with two theories; Allport's (1954) Contact theory and the theory of planned behavior (Beck and Ajzen, 1991).

According to previous research, the main factors that arise are; the competences of the teachers, motivation, and joy of the students, and sharing knowledge between practitioners (Belley-Ranger *et al.*, 2016; Jin, Yun and Agiovlasitis, 2018; Kudryavtsev *et al.*, 2019; Mcgrath, Crawford and Sullivan, 2019). In the part of the Definition of the decision on support in basic education, it can be seen that each country has some statements in the Education Act for equality and for the right to receive support for learning. However, these statements have been formed slightly differently. The main factors that arise from the initiatives, projects, and documents investigated were; the importance of inspiration/idea banks, and the option for adapted sporting events. Case data were obtained only from two Finnish Schools, however, the good practices which were arisen were; active school environment for all, student involvement in action, use of exercise programs, active transportation if possible, and use of special equipment. (Laukkanen, 2019; Silvasti, 2019)

The four components of contact theory are; equal status, cooperative pursuance of common goals, personal interactions, and support from authority (Allport, 1954; Pettigrew, 1998; Mckay, 2018). There are similarities in the themes found from the data collected and the components of contact theory. In the theory of planned behavior, attitude toward the behavior refers to a positive or negative predisposition toward the behavior in question (Beck and Ajzen, 1991; Theodorakis, 1995). These attitudes towards the behavior can be compared to the theme of motivation and joy of the students, where the activities have been planned to fit everyone, and by that everyone can get the joy of movement and feel of inclusion, which promotes the positive attitudes to physical activity in general.



5.3 Discussion

Three conditions must be met before inclusion can be considered; students must be physically present to form a group, students in the group must interact together, in addition, students should feel that they have a mutual benefit from participation (Dansk Skoleidræt, 2019b). It has been identified that an inclusive approach benefits everyone in the school community, not only the students in need. Sharing knowledge about the opportunities for special support and the practices of how to work with students who need support is the key to inclusion. (Haapala et al., 2014)

When investigating these three countries, it is possible to see that the countries are giving an effort for including students with special needs within the physical activity context. However, the approaches are slightly different in each country. It appears that Finland has knowledge of the area of how to include students with special needs during the school days, which means classroom physical activity, break time physical activity or afterschool physical activity. Sweden has adapted sporting events and initiatives concerning students with special needs. What comes to Denmark, there are high knowledge and emphasis on inclusive Physical Education. The competences from the three countries fulfill different areas, therefore, the ideal situation would be to combine all the knowledge to get comprehensive results.

Each country has an inspiration/idea bank of activities. However, when the information is in a foreign language, there might be language barriers to reach the new knowledge. As it has been expressed widely that sharing knowledge is the key, there should be even more emphasis on benchmarking and combining different competences to get the best results. What if there would be one big international inspiration/idea bank of activities so everyone could gain and share their knowledge despite the language barriers?



5.4 Conclusions

The goal of the project was to explore and find solutions on how to approach the inclusion of students with special needs within the Finnish Schools on the Move programme by examining case schools from Finland, Sweden, and Denmark. 1 case/country. However, the empirical data were obtained only from two Finnish schools. Since the purpose was to explore approaches from these different countries, initiatives/projects and document material were used to get the data set required. There were two research questions guiding the study:

Research Questions

1. By what concrete practices schools can promote the inclusion of students with special needs for physically active school day?

The school environments can be constructed with a variety of equipment for physical activity, for instance, pan arena, balance beams, spinning tops, and frisbee golf baskets. In addition, functional paths and action stations can be painted on the asphalt in the schoolyard. Moreover, it can be designed with the students' thoughts and involvement. Small groups should include assistants, in addition, personal assistants, who assist and seek to develop student's motor skills. Already made programs can be used, for instance, "KKK-maharumpu", exercise Christmas calendars, and break exercise video clips. The teachers can use active teaching methods during lessons, including exercise breaks. Playing can be the focus and physical activity can be built around it. A variety of equipment can be used to support teaching. In the classrooms, students who have problems with concentration could have a choice to choose a big gym ball instead of a chair. Special classes can have regular walks on a daily basis since students in special classes are often inactive during their leisure time, which means that the daily amount of physical activity consists highly of the activity during the school day. Finally, students can be encouraged to prefer active transportation when changing location if possible. (Laukkanen, 2019; Silvasti, 2019)



2. What factors influence the inclusion of students with special needs?

There were several relevant factors shown throughout the collected data. The main factors that arise were the competences of the teachers, the motivation, and the joy of the students, and sharing knowledge between practitioners. In addition, the importance of inspiration/idea banks, option for adapted sporting events, active school environment for all, student involvement in action, use of exercise programs, active transportation if possible, and use of special equipment.

Finally, it has been identified that all three countries under the investigation in the study had slightly different competences in the field. Therefore, the ideal situation would be to combine all the knowledge and competences from the countries to build the best strategy.



6. Suggested Solutions

Research and Development questions for the project

- 1. By what concrete practices schools can promote the inclusion of students with special needs for physically active school day?
- 2. How can Finnish Schools on the Move programme develop in its operations with the inclusion of students with special needs?

The suggested solution for Finnish Schools on the Move consists of a few phases. If there are resources, it would be recommended to go through the material and findings that have been found in this project. For instance, the work that Denmark has done to include students with special needs in PE is valuable. The guidebook of Flygstrup, Selmer and Soulié (2018) for inclusive PE classes can be used to get some inspiration, however, with a little effort if translating the text. The book chapters can be found free from the internet (Flygstrup, Selmer and Soulié, 2018). Even though the material handles the inclusion in PE, with a little creativity, the activities can be applied to different contexts, for instance, classroom, break time, or afterschool activities. In addition, new cooperation between the countries would be recommended. For instance, Byskovskolen in Denmark provided an opportunity to come to visit the school to see their ways of working in action. That sort of opportunities and cooperation would be needed if the resources allow.

The next step would be organizing nationally workshops, where the new knowledge would be discussed, and thoughts could be shared between practitioners. In addition, in the workshops, it could be possible to create customized plans since every school has its own needs. By teamwork and sharing knowledge it could be possible to make influential plans regarding the inclusion of students with special needs and put it into practice. Schools would implement their own action plan based on the workshops, and there could be a platform created where it would be possible to share good practices. The longer-term goals would be keeping the cooperation internationally and nationally to update and share the data and knowledge.



Suggested action plan for cooperation and sharing knowledge internationally and nationally:

- 1. Explore and gather relevant material from the Research and Development project
- 2. Initiate new collaborations internationally
- 3. Visit collaboration schools (if resources allow)
- 4. Organize workshops nationally (sharing new knowledge)
- 5. Schools set the action plans into practice (platform created for communication and sharing)
- 6. Maintain collaboration internationally and nationally



7. Evaluation

In this Research and Development project, the most relevant phase to be evaluated is the process, how well it went in comparison with the planned activities and milestones.

7.1 Results & Analysis

There were several changes during the project if compared to the original plan. Since the calendar time given was relatively short, contacting the stakeholders should have needed to start earlier. There should be more time calculated for the communication process, especially when working with external organizations. However, sometimes even if there would be enough calendar time, there might be some other variables on the way. For instance, the organizations from Finland, Sweden, and Denmark (Finnish Schools on the Move, Generation Pep, Parasport Danmark) replied quickly and recommended potential case schools. Getting a reply from the schools took more time, which is quite understandable.

Empirical data from the case schools from Sweden and Denmark were lacking since the teacher of Rosenhillskolan (Sweden) who has the knowledge of working with special students was on sick leave, and Byskovskolen (Denmark) had their knowledge in their book (ALLE TIL IDRÆT). Therefore, to get some more empirical data than one case from Finland, another school from Finland were contacted. Brief descriptions were obtained from Pohjankylän koulu (Finland) and Repokankaan koulu (Finland). However, there were some holidays going on at that time and the data collection went late.

In the original plan, the deadline for the project would have been 5th November 2019, however, the time was extended, and the new deadline changed to 26th November 2019. That provided more time to collect data. Therefore, some figures in the project planning section would not look the same at the end of the project, since the time schedule (Gantt chart) changed, but also the stakeholder map has changed during the process. However, that is the nature of project work and then it is important to adjust to the variables and proceed with the process with a new plan. Moreover, working with four languages (English, Finnish, Swedish, Danish) took more time when finding data and



processing it. Therefore, at the end of the project there was not that much time to focus on the quality since the time was limited. There was no time left to make the project report visually attractive, even though it was the original plan.

7.2 Discussion

Regarding scientific considerations, the quality and rigor might not be that high in the project since working with foreign languages, there is a risk to understand something wrong from the original text. However, the competence of a Danish student colleague was utilized when working on the Danish data. Moreover, there might not be enough data since the data from Swedish and Danish schools were missing, which might lower the reliability. To ensure credibility, the report should have gone through several checking and peer-review.

Regarding ethical considerations, there was not any specific consent sent to the stakeholders. The data did not concern any person; however, the names of the stakeholders were used. To justify this, for the sake of cooperation, it might be relevant to share the contact persons so all the stakeholders could reach them and build new collaborations more easily. Moreover, the project report will stay between the stakeholders and the Malmö University, therefore, the data will not spread externally.

Regarding social considerations, it is hard to reveal any results, how the project has influenced society. However, it can be said that the project has the potential to influence future actions in the field if the organizations or schools find something new and inspiring from the findings from the project. By that, they can develop their actions towards better ways to work more inclusive and that promotes equality.

7.3 Conclusions

In conclusion, contacting the stakeholders should have started earlier in the process of the project. However, extended time was given to the project until 26th November 2019. The language barrier brought a small twist to the project and therefore there should have been a project group that would have brought in different competencies.



8. References

Cover photo: (Gibson, no date)

Åkesson, J. (2019) 'Ethics in Research'. Malmö University. Lecture.

Allport, G. W. (1954) The nature of prejudice. Reading, MA: Addison-Wesley.

Beck, L. and Ajzen, I. (1991) 'Predicting Dishonest Actions Using the Theory of Planned Behavior', 301, pp. 285–301.

Belley-Ranger, E. *et al.* (2016) 'Determinants Of Participation In Sport And Physical Activity For Students With Disabilities According To Teachers And School-Based Practitioners Specialized In Recreational And Competitive Physical Activity', XXV(3), pp. 135–158. doi: 10.1515/ssr-2016-0008.

Bryman, A. (2012) Social Research Methods. 4th editio. Oxford University Press.

Byskovskolen (2018) 'Byskovskolens ANTI-mobbe- strategi "STOP-MOB", pp. 1-5.

Byskovskolen (2019) *Om Byskovskolen*. Available at: https://byskovskolen.skoleporten.dk/sp/p373530/foreside?pageId=4c1edff4-4937-4679-bfa3-70b34317e7be (Accessed: 13 November 2019).

City of Kalajoki (2017) *Schools on the move - city of Kalajoki. Video.* Available at: https://www.youtube.com/watch?v=d2lwhmgGcDQ&list=PLQD0GyzWN465DcrYj3LMTpJbWK wJrfuxn (Accessed: 10 November 2019).

Dansk Skoleidræt (2019a) Alle børn med i idrætsfaget Kom godt i gang Inklusion af børn med særlige behov i idrætsfaget.

Dansk Skoleidræt (2019b) *Inklusion i fokus*. Available at: https://skoleidraet.dk/aktiviteter/aktivitetstyper/idraetsfaget/den-åbne-skole/handicapidraet/ (Accessed: 29 October 2019).

Dansk Skoleidræt (2019c) *Mission & Vision*. Available at: https://skoleidraet.dk/om-dansk-skoleidraet/organisation/mission-vision/.

Dansk Skoleidræt (2019d) *Om Dansk Skoleidræt*. Available at: https://skoleidraet.dk/om-dansk-skoleidraet/ (Accessed: 21 October 2019).

Finnish Schools on the Move (2016) *Increasing physical activity and decreasing sedentary time among school-aged children*. Available at: https://liikkuvakoulu.fi/english (Accessed: 7 October 2019).

Finnish Schools on the Move (2018) *Iloon yli esteiden -ideapankki*. Available at: https://liikkuvakoulu.fi/ideat/iloon-yli-esteiden-ideapankki%0D (Accessed: 1 November 2019).

Finnish schools on the Move programme (2015) More active and pleasant school days.

Finnish Sports Association of Persons with Disabilities (2019) Kuortaneen Junior Games -kisat on sovellettu versio perinteisistä koulujenvälisistä mittelöistä. Available at:



https://www.vammaisurheilu.fi/uutinen/7042-kuortaneen-junior-games-kisat-on-sovellettu-versio-perinteisista-koulujenvalisista-mitteloista (Accessed: 5 November 2019).

Flygstrup, B., Selmer, J. and Soulié, T. (2018) *ALLE TIL IDRÆT*. Handicapidrættens Videnscenter. Available at: https://handivid.dk/alletilidraet/alle-til-idraet-hent-kapitler-og-aktiviteter/.

Generation Pep Sweden (2019a) *About Generation Pep*. Available at: https://generationpep.se/sv/in-english/ (Accessed: 21 October 2019).

Generation Pep Sweden (2019b) *Inspirationsbanken*. Available at: https://generationpep.se/sv/inspirationsbanken/ (Accessed: 25 November 2019).

Generation Pep Sweden (2019c) *Om Generation Pep*. Available at: https://generationpep.se/sv/hur-vi-arbetar/om-oss/ (Accessed: 21 October 2019).

Gibson, C. (no date) *Para School Day*. Available at: https://www.liiku.fi/kouluille-ja-oppilaitoksille/ajankohtaista-kouluille/paraschool-week/ (Accessed: 26 November 2019).

Haapala, H. *et al.* (2014) 'LIIKKUVA KOULU KAIKILLE OPPILAILLE – TOIMINNALLISUUTTA INKLUSIIVISESTI', *Poster*, p. 40720.

Hentunen, J. (2019) 'Yhdenvertaisuuden edistäminen ja Move!:n hyödyntäminen Liikkuva koulu - kunnissa'. LIKES.

Huddinge (2019) *Rosenhillskolan*. Available at: https://www.huddinge.se/rosenhillskolan (Accessed: 12 November 2019).

Iloon Yli Esteiden (2018) 'Onko koulusi jo liikkuva koulu ? Pääsevätkö kaikki oppilaat mukaan ? Hae mukaan kehittämään liikkuvampaa koulupäivää myös erityisen tuen oppilaille . Ideoidaan yhdessä lasten kanssa , miten teidän koulussa liikutaan !', p. 2018.

Jin, J., Yun, J. and Agiovlasitis, S. (2018) 'Impact of enjoyment on physical activity and health among children with disabilities in schools', *Disability and Health Journal*. Elsevier Ltd, 11(1), pp. 14–19. doi: 10.1016/j.dhjo.2017.04.004.

Kalajoen kaupunki (2019) 'LIIKKUVA KOULU - LIIKKUVA KALAJOKI', pp. 1-12.

Kudryavtsev, M. *et al.* (2019) 'Implementation of the inclusive learning model in the process of physical education of the students with physical disabilities .', 19(3), pp. 971–979. doi: 10.7752/jpes.2019.s3140.

Laukkanen, E. (2019) Repokankaan koulu, case. e-mail interview. (6 November 2019).

LIKES (2019) *Finnish Schools on the Move research and follow-up*. Available at: https://www.likes.fi/en/research/finnish-schools-on-the-move (Accessed: 8 October 2019).

Lounsbery, M. A. F. (2017) 'School Physical Activity: Policy Matters.', *Kinesiology Review*, 6(1), pp. 51–59. doi: 10.1123/kr.2016-0038.

Mcgrath, O., Crawford, S. and Sullivan, D. O. (2019) " It " s a challenge ': Post Primary Physical Education Teachers ' experiences of and perspectives on inclusive practice with students with disabilities', pp. 1–15. doi: 10.5507/euj.2018.011.



Mckay, C. (2018) 'THE VALUE OF CONTACT : UNPACKING ALLPORT 'S CONTACT THEORY TO SUPPORT INCLUSIVE EDUCATION', *PALAESTRA*, 32(1).

Ministry of Children and Education (2019a) 'Bekendtgørelse af lov om folkeskolen', (19/08666).

Ministry of Children and Education (2019b) *Regler for specialundervisning*. Available at: https://www.uvm.dk/folkeskolen/laering-og-laeringsmiljoe/specialundervisning/regler-for-specialundervisning (Accessed: 28 October 2019).

Ministry of Justice (2019) *Mitä yhdenvertaisuudella tarkoitetaan?* Available at: https://yhdenvertaisuus.fi/mita-on-yhdenvertaisuus (Accessed: 9 October 2019).

Nordic Council of Ministers (2012) Nordic Nutrition Recommendations 2012. 5th edn.

Parasport Sverige (2019) *Special Olympics School Days*. Available at: https://generationpep.se/sv/inspirationsbanken/special-olympics-school-days/ (Accessed: 8 November 2019).

Peda.net (2019) *Pohjankylän koulu*. Available at: https://peda.net/kalajoki/peruskoulut/pohjankylän-koulu (Accessed: 8 November 2019).

Pettigrew, T. (1998) 'Intergroup contact theory'.

Repokankaan koulu (2019) 'Lukuvuositiedote 2019 -2020'.

Silvasti, J. (2019) Pohjankylän koulu, case. e-mail interview. (4 November 2019).

Silverman, D. (2013) Doing Qualitative Research: A Practical Handbook. Fourth Edi. Sage.

Skolverket (2016) 'Tillgängliga lärmiljöer ?'

Skolverket (2019) *Att göra extra anpassningar av undervisningen och ge särskilt stöd*. Available at: https://www.skolverket.se/skolutveckling/inspiration-och-stod-i-arbetet/stod-i-arbetet/extra-anpassningar-och-sarskilt-stod (Accessed: 28 October 2019).

Smith, B. and Sparkes, A. (2016) *Routledge Handbook of Qualitative Research in Sport and Exercise*. London: Routledge.

Soulié, T. (2019) 'E-mail (4 October 2019)'.

Special Olympics Sweden (2019) 'Special Olympics School Days', document.

Stewart, C. C. (1988) 'Modification of Student Attitudes Toward Disabled Peers', (1985), pp. 44–48.

Tammelin, T. *et al.* (2015) 'SCHOOL MAKES YOU MOVE AND SIT STILL Finnish Schools on the Move research results 2010 to 2015', *LIKES*.

The Finnish Ministry of Education (2011) Perusopetuksen opetussuunnitelman perusteiden muutokset ja täydennykset 2010.

The Finnish Ministry of Education (2019) *Oppimisen ja koulunkäynnin tuki*. Available at: https://www.oph.fi/fi/koulutus-ja-tutkinnot/oppimisen-ja-koulunkaynnin-tuki (Accessed: 23 October 2019).



The Finnish Ministry of Education and the Nuori Suomi sports organization (2008) 'Recommendations for the physical activity of school-aged children', *National Physical Activity Plan*, pp. 1–38. Available at:

http://www.physicalactivityplan.org/reportcard/2016FINAL_USReportCard.pdf.

Theodorakis, Y. (1995) 'Attitudes Toward Teaching fndividuais With Disabiiities : Application of Planned Behavior Theory'.

TIBIS (2019a) *Løsningen ligger i mind-settet!* Available at: http://tibis.dk/loesningen-ligger-i-mind-settet/ (Accessed: 29 October 2019).

TIBIS (2019b) Om TIBIS. Available at: http://tibis.dk/om-tibis/ (Accessed: 6 November 2019).

TIBIS (2019c) *Tilpasset Idræt og Bevægelse i Skolen*. Available at: http://tibis.dk/ (Accessed: 5 November 2019).

Tonnquist, B. (2009) Project Management. 1st editio. Edited by J. Hørlück. Aarhus: Academica.

Tøttrup Andersen, A. (2019) 'E-mail (3 October 2019)'.

United Nations (2015) 'THE 2030 AGENDA FOR SUSTAINABLE DEVELOPMENT', United Nations Department of Economic and Social Affairs. doi: 10.1080/02513625.2015.1038080.

Valteri Centre for Learning and Consulting (2018) Iloon yli esteiden -ideapankki.

WHO (2018a) *Let's be active*. Available at: http://www.who.int/ncds/prevention/physical-activity/gappa/ (Accessed: 9 October 2019).

WHO (2018b) *Physical activity and young people*. Available at: http://www.who.int/dietphysicalactivity/factsheet_young_people/en/ (Accessed: 9 October 2019).

Yrkesföreningar Fysisk Aktivitet (2019) *FYSS – vägen till bättre folkhälsa*. Available at: http://www.yfa.se/fyss/vad-ar-fyss/ (Accessed: 21 October 2019).

Zainal, Z. (2017) 'Case study as a research method', Jurnal Kemanusiaan.



9. Appendices

9.1 Project Charter for the R&D -project



26/09/2019

PROJECT CHARTER

NAME OF THE PROJECT	Research & Development project concerning the inclusion of students with special needs Johanna Salmela (Malmö University) Malmö University	
	Finnish Schools on the Move	

	Finnish Schools on the Move is a national action programme where the aim is to promote physically active culture in Finnish comprehensive schools.	
	The objective of the project is to promote the inclusion of students with special needs within the Finnish Schools on the Move programme.	
PROJECT GOAL	The goal of the project is to explore and find solutions on how to approach the inclusion of students with special needs. Case schools from Finland, Sweden, and Denmark. 1 case/country.	
	START: 03/09/2019	FINISH: 07/11/2019
	0	

DOCUMENTATION RECEIVED BY:

JOHANNA SALMELA (MALMÖ UNIVERSITY)	DATE
KIRSI NAUKKARINEN (FINNISH SCHOOLS ON THE MOVE)	DATE
KAARLO LAINE (LIKES)	DATE



9.2 Project Charter for the suggested solution





PROJECT CHARTER for suggested solution

NAME OF THE PROJECT	Research & Development project concerning the inclusion of students with special needs	
PROJECT MANAGER	Johanna Salmela (Malmö University)	
PROJECT OWNER	Malmö University	
RECEIVER	Finnish Schools on the Move	

BACKGROUND	Finnish Schools on the Move is a national action programme where the aim is to promote physically active culture in Finnish comprehensive schools.		
PROJECT OBJECTIVE	The objective of the project is to promote the inclusion of students with special needs within the Finnish Schools on the Move programme.		
PROJECT GOAL	The goal of the project is to explore and find solutions on how to approach the inclusion of students with special needs. Case schools from Finland, Sweden, and Denmark. 1 case/country.		
TIMEFRAME	START: 03/09/2019	FINISH: 26/11/2019	
BUDGET	0		
SUGGESTED SOLUTION	 Suggested action plan for cooperation and sharing knowledge internationally and nationally: Explore and gather relevant material from the R&D project Initiate new collaborations internationally Visit collaboration schools (if resources allow) Organize workshops nationally (sharing new knowledge) Schools set the action plans into practice (platform created for communication and sharing) Maintain collaboration internationally and nationally 		