

Master Thesis

Claire-lyse Truffert

HOW IS PE TAUGHT IN  
NORWEGIAN LOWER  
SECONDARY SCHOOLS TODAY?



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Claire-lyse Truffert

# [ HOW IS PE TAUGHT IN NORWEGIAN LOWER SECONDARY SCHOOLS TODAY? ]

A qualitative study among PE teachers.



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Claire-lyse Truffert

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## **Preface**

This thesis concludes my Master of Sports, Physical Education and Outdoor Life Education at Telemark University College, located in Norway.

I have mixed feeling about the work I deliver now. I should admit that it feels good but also strange to put an end to this project which has occupied my mind for the last 4 years. I am though happy to be done and exiting to see what comes next.

I would like to thank all the personnel of the library who were very supportive and helpful and understanding when I did not return the books I had borrowed on time.

I would like to thank the schools and especially all the teachers who made this research real and possible to conduct.

Thank you my friends and family for being here for me and always have nice words to say even when I was feeling down. And a special thanks to Nicole for her invaluable help with the language issues.

It has been a long, challenging, frustrating and irritating project. It has also been very rewarding and exiting. I have learned a lot about different topics and most of all I have learned a lot about myself, and the teacher I want to be.

Claire-lyse Truffert

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## **Abstract**

The present study is about motivation in Physical Education (PE). The purpose of this research paper is to gain better knowledge of strategies that teachers of lower secondary schools use to motivate their pupils in PE. The reason for the chosen theme is that motivation is a widely used term that can be difficult to define, even if it seems "easy to understand". Moreover motivation is something that has to be stimulated. My goal was to understand how I as a teacher would affect the motivation of my pupils in the future. I chose therefore to investigate how teachers motivate their pupils in physical education.

Methodically I used qualitative interviews of seven teachers in secondary schools in various secondary schools distributed at Akershus, Telemark, Buskerud and Oslo. The purpose of the interviews was to identify teachers' strategies to motivate their pupils. The structure of the interviews has been based on the TARGET-model (Epstein, 1988, 1989) which is a compilation of theoretical strategies which are involved in building a motivational climate in the classroom. My wish was to understand how these strategies are used in practice in the purpose of increase pupils' motivation toward PE.

Through the interviews and the results I discussed the different structural features presented in the TARGET model which are Task, Authority, Recognition, Grouping, Evaluation and Timing. These features gave a structures to my interviews and the last chapter of this paper when it came to present and discuss the results of the interview. One by one I discussed these six features which are the "basic building blocks" of the achievement setting according to Epstein (1988). Teachers' answers were in favor to foster a mastery climate which has been associated with positive effects such as a positive attitude towards the activity, feelings of satisfaction, high perceptions of ability, the choice of challenging tasks, high intrinsic motivation, and placing a high value on effort and the process of learning on learning in PE settings in several studies (e.g. Ames, 1992b; Ames & Archer, 1988; Carpenter & Morgan, 1999; Treasure, 2001, Roberts, 2012).

Keywords: Physical education, motivation, AGT, lower secondary school

## Sammendrag

Temaet for denne undersøkelsen har vært motivasjon i kroppsøvfingsfaget. Målet med denne oppgaven har vært å få en bedre forståelse for strategier som brukes av ungdomsskolelærere for å motivere elevene deres i kroppsøvfingsfaget. Bakgrunnen for det valgte tema er at motivasjon er et mye anvendt begrep som er vanskelig å definere, samtidig som det synes «lett å forstå» og som man må stimulere. Min undring omhandlet hvordan jeg som lærer skulle påvirke motivasjon til elevene mine i fremtiden. Jeg valgte dermed å undersøke hvordan lærere motivere elevene sine i kroppsøving.

Metodisk brukes kvalitative intervju av sju lærere i ungdomsskolen på forskjellige ungdomsskoler fordelt på Akershus, Telemark, Buskerud og Oslo. Hensikten med intervjuene var å identifisere læreres strategier for å motivere elevene sine. Strukturen på intervjuene ble basert på TARGET-modellen (Epstein, 1988, 1989), en samling av definerte teoretiske strategier som er med på å skape et motivasjonsklima. Mitt ønske var å se hvordan disse strategiene er brukt i praksis for å øke elevens motivasjon mot kroppsøving.

Gjennom intervjuene og resultatene diskuterte jeg de forskjellige strukturelle trekkene presenterte i TARGET-modellen som er Task (oppgave), Authority (autoritetstruktur), Recognition (Tilbakemelding og erkjennelse), Grouping (gruppesammensetting og samarbeid), Evaluation (evaluering) og Timing (tid til rådighet). Disse trekkene ga et struktur til mine intervjuer og siste kapittel av denne oppgaven da jeg presenterte og diskuterte resultatene av intervjuene. En etter en jeg diskuterte disse seks trekkene som er de "grunnleggende byggesteinene" av prestasjon innstilling i følge Epstein (1988). Lærernes svar var i favør for å fremme et mestringsklima som har vært forbundet med positive effekter for eksempel en positiv holdning til aktivitet, følelse av tilfredshet, høye oppfatninger av evne, valg av utfordrende oppgaver, høy indre motivasjon, og plassere en høy verdi på innsats og læringsprosessen på læring i PE innstillinger i flere studier (eg Ames, 1992b; Ames & Archer, 1988; Carpenter & Morgan, 1999; Treasure, 2001, Roberts, 2012).

Nøkkelord: kroppsøving, motivasjon, AGT, ungdomsskole

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## **Introduction**

My study is about physical education in lower secondary schools in Norway. More precisely I am interested in investigating how PE is taught to increase pupils motivation toward the subject at this level.

This paper will answer questions about what teachers choose to do and not to do in order to motivate their pupils toward PE. For this purpose I will first go through the different definitions which are relevant for this topic. Succeeding the theoretical frame, the chapter presents the method I chose to use for my investigation. Further the chapter will go through the results of the investigation, discussing the results, confronting them with earlier studies and beliefs.

I have been interested in motivation, and how to motivate, how to keep up the motivation since this notion was presented to me during my second year of my bachelor's degree. It is fascinating because motivation is meaningful for all type of activities. To be motivated is important to start an activity but also give a goal and meaning to this activity. Nevertheless there are many ways to define and explain motivation and the studies about motivation have had different point of views on this topic. According to Ford in 1992, there were already 32 theories of motivation. Each of them having their own definition for motivation. One example would be the Achievement Goal Theory (AGT) which builds on studies within the educational field, including PE. This theory has become very popular when it comes to understanding a person's intentions in sport and PE. It claims that the learning environment around a pupil which can be created by the parents, the others pupils and the teacher has an important impact on that pupil's motivation (Nicholls, 1989). As a future PE teacher I wish that this thesis will help me better understand the strategies used to motivate pupils in PE in lower secondary school so that I know where to start when I will begin teaching myself. Thus AGT seemed to be relevant for this study. More specifically the TARGET model developed by Epstein to represent several features she thought had to be considered to create a motivational climate (1988, 1989). These structural features are seen as independent variables, but when put together create a motivational climate of a context. The TARGET guidelines were originally written for school classroom lessons and have been applied to the youth sport and PE settings (Ames, 1992b). The TARGET model has been investigated in the past and showed important results when it comes to increase one's motivation toward an activity, including PE.

During a conference in June 2012 called «Kroppsøvingsfaget i bevægelse – status og udfordringer» (Physical Education in movement – status and changes) it was presented that 30 percent of the pupils do not like, or even hate, the physical education they meet at school. This shows that improvement should be made to increase pupil's interest toward the activity. I believe that motivation is one aspect that should be strongly considered since AGT (Nicholls, 1989) assumes that it is the strategies that one decides to use that will create a motivational climate. Teachers have an important role through the decisions they make to foster the climate that is ultimate for learning in PE settings. Moreover intervention studies manipulating the TARGET structures to create a mastery focused teaching environment (Digelidis, Papaioannou, Lapidis, & Christodoulidis., 2004; Morgan & Carpenter, 2002; Solmon, 1996; Treasure, 1993) have described the enhancement of pupils' motivation and learning in PE settings. Therefore this study is focusing on teachers and their choices for strategies to teach PE with their pupils.

## List of abbreviations

PE	Physical Education
PA	Physical Activity
LK06	Kunnskapsløftet: school reform which gave birth to new curriculum for physical education in 2006
Udir	Utdanningsdirektoratet (the Directorate of Education)
vg	Videregående skole (upper secondary school)
AGT	Achievement Goal Theory
TARGET	Task, Authority, Recognition, Grouping, Evaluation, Time
NSD	Norsk Samfunnsvitenskapelig Datatjenestethe (Norwegian social science data services)

# 1. Theoretical frame

## 1. Physical Education

The birthplace of this paper is in PE as a subject in the lower secondary schools in Norway. Therein lays the desire to investigate how teachers motivate their pupils in PE.

PE is a general study subject but also a subject in which the practical use of the body in various types of activities is significant (Udir, 2012). The curriculum describes how PE should be approached at the different school's levels.

### 1. The curricula

Norwegian schools have gone through major changes regarding both subjects provided and the content in the subjects to become what it is today. Physical Education, or gym class, was being first mentioned in the "Lov om allmueskoler i byene" (Law which regulated the schools located in urban areas) in 1848. This law mentioned that it was desirable with teaching gymnastics for boys and handwork for girls. In 1860, "Lov om skoler på landet" (law which regulated the schools located in rural areas) came into formulation. Until 1959 schools located in urban and rural areas were regulated through separate laws in Norway. As a result, schools located in the cities had a much higher number of teaching hours than the schools located in rural areas. Moreover it varied how the hours were divided between the school subjects, also for PE.

It was then in 1936 that Physical Education enters the curriculum as a compulsory subject, and since then it has grown through five different curricula. "Normalplanen" of 1939 was a detailed plan with the minimum criteria about what the student should learn for each grade. This curriculum also which established the minimum number of hours in each subject, including PE. But because at this time there were still differences between urban and rural schools, there were several curricula for PE with numerous variations. One of these being the number of hours still being unequal in the discipline (Brattenborg & Engebretsen, 2007). In the "Forsøksplanen" in 1959 both urban and rural schools are joined to form the public schools of Norway. The purpose of PE was reconsidered with this new curriculum and henceforth seen as a tool for development of man to focus on getting knowledge of rational use of the body and health (Brattenborg & Engebretsen, 2007). In 1974 a new curriculum

came out. "Mønsterplan" was the first curriculum to look at PE with an interdisciplinary perspective where gender was considered equal (Brattenborg & Engebretsen, 2007). This 1974 curriculum emphasized the pupils' needs for physical activity for both genders. The next curriculum ("Mønsterplan" of 1987) was very similar to the previous law when it comes to PE. It adversely emphasizes knowledge goals, growth and personal development through play and activity (Brattenborg & Engebretsen, 2007). It was then in 1997 that the curriculum in physical education would give clear guidelines for content, organization of content and varied use of methods, and goals (Brattenborg & Engebretsen, 2007). Outdoor life and dance become obligatory contents of PE with L-97. When it comes to the values of PE subject, it is emphasized that PE subject should help to develop a positive attitude towards one's own body and the health perspective of PE was recognized.

Kunnskapsløftet (often abbreviated LK06) is a reform that came in effect in 2006. It is both a curriculum and targeted plan. LK06 is different than previous curricula in that it is less extensive and detailed while keeping the previous goals central. The new curriculum says something about the purpose of the subject, the main areas it should teach, the basic skills, competence objectives and assessment according to the Directorate of Education (Udir, 2006b). LK06 describes PE as an inspiration for physical activity and lifelong enjoyment of being active. The subject of PE covers a wide selection of activities grouped into four areas. Physical activities in various environments and setting to start with covers the development and automation of basic movement in indoor and outdoor environments through organized activities and spontaneous play (grade 1-4). Sports activities include a selection of sports, dance and alternative physical activities in which movement, play and creative activities are emphasized (grade 5-7,8-10,vg1-vg3). Outdoor life covers competences and skills needed to do things safely in nature and see the value of visiting natural environments (grade 5-7,8-10,vg1-vg3). Exercise and lifestyle focus on various activities and how training and exercise influence one's health (grade 8-10,vg1-vg3). Within these four areas are a list of competence aims to reach for the different levels (grade 5-7,8-10,vg1-vg3). The education given through PE both at the primary and secondary level should be individualized and designed based on the pupils interests, social needs and physical challenges. The teachers are in charge of selecting content, activities and working methods based on competence goals outlined for each level. (Brattenborg & Engebretsen, 2007).

## **2. A new revised curriculum for PE**

Based on the dissatisfaction among pupils and teachers regarding different aspects of PE, the Directorate of Education put together a working group which initiated one revised curriculum in PE January 8, 2012 (Lyngstad & all., 2011).

Through readings and seminars the working group highlighted aspects of PE which had to be improved or changed. In their article they mentioned relevant studies, debates, media reports and several viewpoints which lead to think that the curriculum of PE needed to be modified. The working group was asked by the Directorate of Education to focus on the purpose of PE, the main areas and the competence aims at the different levels. The Directorate of Education came up with a revised curriculum for PE in august 2012 after having taken in consideration what the working group had reported about the PE subject. This revised curriculum is the curriculum in effect today.

The subject has been given a clearer purpose than before. The purpose set terms about how students and teachers are working with competence goals. The pupils are to be taught to understand the requirement to achieve their own goals. Physical activity and movement are seen as important and necessary for everyone as it fosters good health. At the same time, PE contributes to strengthen self-esteem, identity and multicultural understanding through knowledge about exercise and health and the social aspect of physical activity. The education should give the pupils the opportunity to reflect on and evaluate their own effort and abilities. As a result of the revised curriculum, the types of activity used to teach PE are organized activity, free activity and experimentation, as well as fair play (show respect for each other) and common rules. The purpose has taken into account the diversity of movement ideals that excites youth culture (Udir, 2012). The main areas have now changed so that training in lower and upper secondary school have the same three main areas: Sports Activities, Outdoor & Exercise and Lifestyle. These changes make the progress of the pupils' competences through the different levels distinct (Udir, 2012). The basic skills are adjusted and names are changed. "To be able to express themselves verbally", "to use digital tools" are changed to "oral skills" and "digital skills".

Competence aims are changed so that visual progressions between the different school years can be seen. They build increasingly on each other and the complexity increases beyond the years. Competence aims are more clearly related to the purpose and the main areas of the subject.

The Regulations of the Education Act made also changes to the basis for assessment in §§ 3-3 in 2006. The Regulations of the Education Act regulates various aspects of education. It contains a set of rules such as pupil's assessment and school feedback to pupils and their parents, complain about the assessment, the safety of the pupils, the right for counseling depending on the pupil's conditions. With the new changes, effort is now part of the basis for assessment of the subject and it is no longer stipulated that the pupil's abilities is a part of the basis for assessment. Effort is when a pupil tries to complete challenging tasks doing his/her best and never giving up, showing independence and challenging his/her own physical capacity. A pupil can in spite of poor competence and low abilities get a good grade if the pupil shows good effort in the subject. Therefore it is considered as important for the teacher to evaluate the pupils' mastery and effort for each competence aim and main area. Normative evaluation as tests as it was used in the past are no longer accepted since it results on comparing the pupils. Tests can be define as a standard measurement of specific abilities. Pupils also mentioned that they experience tests negatively as they build up stress and performance press (Lyngstad & all., 2011). Tests can now be used as a tool to teach PE as for the pupils to experience being tested and get an insight of why and how tests can be used, but they cannot be used to evaluate. Tests can also be used individually as part of self-evaluation so that the pupils get direct feedback on their own improvement (Udir, 2012).

The time allowed for PE stays the same as earlier, except in PE as an optional subject where the time is slightly reduced. The working group in 2011 said that the time in PE should be discussed and adapted but it was clarified initially by the Directorate of Education that the number of hours for PE should not be subject to evaluation by the working group. The working group means that the amount of time should increase considerably for the subject's intentions to be realized. They also claim that the number of pupils in each class should be reduced to create better conditions for learning and teaching in PE. Unfortunately this topic was also specified as not to be subject to evaluation by the working group by the Directorate of Education(Lyngstad & all., 2011).

## **1. Definitions and Theoretical Perspectives**

This research is based on the intention to better understand better PE practices in schools when it comes to pupil's motivation and the role of the teachers in improving and maintaining this motivation in their classes. The complex concept of motivation has been

developed during the second half of the 20<sup>th</sup> century. In everyday usage, the term motivation is frequently used to describe why a person does something. However according to Roberts the concept of motivation is in general poorly understood even if it is frequently used by parents, teachers, educators, coaches, politicians, and business leaders (2001). People often think about motivation as a synonym to arousal and/or assume that positive thinking such as confidence, being competitive and having a winning attitude have huge motivational attributes. Others also think about motivation as a trait that is written in our genes. That they see motivation as unwavering. Even if not everything is wrong in what people consider motivation, most of the population are far from understanding the complexity of the whole concept of motivation. There are numerous models dealing with the topic of motivation. They all try to define what motivation is and how it affects one's life. There are so many different points of view on this topic which have given birth to several definitions and understandings of motivation. Nevertheless, all of these models/theories have the common goal of understanding human behavior and the pushing factors of those behaviors. In other words the theories which are dealing with motivation ask WHY we do what we do.

According to Ford in 1992, there were already 32 theories of motivation, each of them having its own definition for motivation; each model having divergent assumptions about humans. Therefore, they claim the sources of motivation to be central for the explanation of behaviors diverge. Through time humans have been seen as robots, active or passive participants in decision making, driven only by needs for example. Motivation theories may be viewed as on a continuum ranging from deterministic, to mechanistic, to cognitive; according to Roberts, who refers to humans as passive beings driven by psychological needs on one side and as active and initiating actions on the other side (2001, 2012). The different theories appear to develop their model in between these two extreme views. Through time the context in which one evolves and the intention of the participant have been seen as important factors in decision making and planning behavior. It is in the late 70's that researchers turned their focus on social cognitive meanings and methods. From this time motivation has been seen as the organized patterning of at least one of three psychological constructs that energize, direct and regulate achievement behaviors. The three constructs mentioned here are personal goals, emotional arousal and personal agency beliefs (Ford, 1992, Roberts, 2001). Goals are described as personal or socially valued, influenced by the context. According to Roberts these goals give meaning to achievement striving and energize subsequent action (2012). Personal agency beliefs refer to the regulation of the

ongoing stream of achievement behaviors which includes initiating, maintaining, increasing and inhibiting achievement striving. They are based on one's beliefs in one's capacity to attain the goal. The last construct mentioned by Ford is emotional arousal. It is seen as a source of energy which affects the achievement striving (Ford, 1992, Roberts 2001).

Roberts defines motivation in physical activity as a result from dispositions, social variables and/or cognition that come into play when a person undertakes a task in which he/she is evaluated or enter into competition with others, or attempts to attain some standard of excellence (1992a). This approach here recognizes that each individual is responsible for the outcome of the task they are executing and sees motivation as a social cognitive process in which individuals become motivated/demotivated through assessment of their competences. There are three social cognitive theories that dominate the researches about motivation in physical activity today: achievement goal theory, self-efficacy theory and self-determination theory. According to Roberts self efficacy has demonstrated its usefulness in understanding motivation in exercise while achievement goal theory and self-determination theory are very pertinent in sport. He also adds that since 1992, the motivation theory that has become the most popular to understand a person's intentions in sport and physical education is the achievement goal theory.

## **2. Achievement Goal Theory**

The Achievement Goal Theory, or AGT, builds on researches within educational field and is based on the work of John Nicholls who introduced the idea and concept that are now recognized as ego and task involvement. After Nicholls' presentation during a seminar in 1977 researchers such as Roberts, Ames and Maehr started focusing on this aspect of motivation that they thought was meaningful to get a complete understanding of an individual's motivation in an achievement context. These ideas were then published (e.g Nicholls 1979, 1984,1989; Maehr & Nicholls, 1980; Ames, 1987) and helped in developing the achievement goal theory that we know today. This theory assumes that a person (a PE teacher in this paper) is an intentional and goal-directed organism. These intentions will determine the behavior to adopt to reach one's goal.

Each of us has various personal resources such as time, talent and effort that each will participate in reaching a goal. The regulation of these resources depends on the task and on the goal a person has. To understand the choices that one makes when it comes to one's personal resources, it is important to understand motivation as a process in which one has to think, evaluate and regulate his/her resources to attain his/her goal. AGT is built on the beliefs that motivation results from one's thoughts and understandings which is also referred to as the process of motivation. The main assumption of AGT is that an individual takes part in an activity with the goal to demonstrate competence and avoid demonstrating incompetence (Nicholls, 1989; Robert, 2012). Motivation involves the person assessing whether to increase or decrease behavioral striving to achieve success and avoid failure. Nevertheless, success has different meanings depending on one's view of what success is and which way leads to it. One of Nicholl's claims in 1984 was to point out that more than one conception of ability exists and that achievement goals and behavior may differ depending on the conception of ability held by the person. In the part I.4. I discuss the different views around this notion of ability with the purpose to understand how the conception of ability affects one's goals and behaviors. It is an important aspect because it is by adopting certain goals seen as appropriate and rejecting others (perceived as non-appropriate) that individuals give meaning to their achievement behaviors. These goals determine then the strategies to adopt and the ones to avoid to achieve one's goals. Within AGT it is personal or socially valued goals that energize achievement striving (Roberts, 2012).

In 1992 Roberts argued that motivation (presented in AGT) referred to dispositions and social variables which become relevant when conducting an action that one is evaluated in or when the very purpose of the action is to achieve a certain psychological goals. This means that AGT could explain one's motivational process in an achievement context. An achievement context can be defined as a task or a situation where one wishes to reach a certain standard with one's actions. Nevertheless even if our perceptions of ability and situations are personal, they can be derived or influenced by context cues or instructions and other people around one person (Roberts, 2012). This means that even though one's cognitive processes are inherent they can be influenced by similar situations or by significant others. Maehr and Nicholls argued in 1980 that personal intentions can be based on social or cultural background. This means that intentions of a student in PE lesson can be influenced by the environment this same student is in. Such environment can be groups or classes and these

groups are involved in creating a set of cultural and social expectations and demands affecting the student.

This theory seems to be relevant to explain the motivational process in schools and PE settings. Therefore I wish here to present the main ideas and beliefs about motivation that AGT has been developing for the last 37 years.

### **3. Undifferentiated and differentiated conception of ability**

According to Nicholls (1984, 1989) pupils in PE would participate in the lessons to demonstrate their competences. Nicholls highlights the fact that there are various conceptions of ability which lead to divergent meanings and consequently lead to different understandings of achievement behaviors.

On one hand there is the differentiated conception of ability within which the individual sees effort and ability as two separate mechanisms. This same individual will then see ability as capacity and see that competence involves outperforming others with equal or less effort, or performing as well as others but with less effort (Nicholls, 1984;1989). The ability of this individual is then seen as other-referenced since he/she looks at other's result/performance to evaluate his/her own. In the field of PE this pupil can be identified as the one always asking the others for their grades after a test or how long it took them to run 500 meters, for example. Even if this same pupil improves his/her personal time (between his/her pre-test and his/her final test), this is not enough to satisfy him/her. This pupil has to beat others or equally perform but with less effort than others. You could hear "I'm the best" coming from this pupil's mouth after having achieved his/her goal.

It can be important to mention here that these individuals feel more often incompetent than others. This can be explained by the fact that they do not valorize effort. A lack of ability is seen as something that cannot be improved with extreme effort (Nicholls, 1989). The feeling of having bad innate competence is difficult to change since one cannot just compensate with effort and strong involvement. Therefore, this pupil would rather choose to avoid activities in which he/she does not feel competent rather than showing incompetence. Avoiding demonstrating incompetence becomes then the main goal for this pupil. A pupil with a differentiated conception of ability will therefore be more likely to give up facing challenges and avoid situations in which he/she feels incompetent.

On the other hand there is the undifferentiated conception of ability within which the individual does not or chooses not to differentiate ability and effort. This same individual will associate ability with learning and personal improvement through effort. High level of effort is then seen as essential for realizing a good performance. He/she believes that the more effort he/she puts in the activity, the more learning (and ability) he/she achieves. The ability of this individual is then seen as self-referenced since personal improvement and the acquisition of knowledge are the main goals that push the individual to get involved in an activity. In contrast to a pupil having a differentiated conception of ability this type of pupil will show satisfaction after having beaten his/her own record, improved his/her knowledge and skills in an activity.

According to Nicholls (1978), Nicholls and Miller (1984) all children have to wait the average age of twelve years old to get familiar with the differentiated conception of ability. They are step by step able to differentiate luck, task difficulty and effort from ability. An individual is undifferentiated in his/her conception of ability once he/she is able to differentiate. Individual “chooses not to differentiate”, Roberts claimed in 1997 (p415). Nevertheless, this found has long been discussed and criticized. But according to Roberts one can shift one’s conception of ability to better suit the situation one is in, depending on the task and on the resources of each individual (2001). It is then possible to hold a differentiated conception of one task, such as wanting to beat his/her opponent and do his/her best to do so, yet still hold an undifferentiated conception at another task like being concerned with improving one’s ability to play the game. In PE these changes can appear with the change of activity or when pupils change throughout classes/ within groups, for example.

The perceptions and beliefs one has about a specific situation form a personal theory of achievement (Nicholls, 1989; Roberts et al. 1997). This personal theory influences then one’s beliefs about how one could perform at their best. According to this theory people differ in their conceptions of ability and criteria of success and in the ways they use these conceptions (Roberts 2012).

#### **4. Involvement**

AGT claims that each conception of ability will have an impact on the involvement of an individual in a task or even on how one reacts to a specific task. There are two states of involvement (the state of ego and task involvement) and both of these states depend on the orientation of the individual as well as the situations (Nicholls, 1989). The difference between these two states is related to the two conceptions of ability (differentiated and undifferentiated). Effectively these two states have been defined by Nicholls (1989) after identifying achievement behavior that utilizes the undifferentiated conception of ability as task involvement and achievement behavior that utilizes differentiated conception of ability as ego involvement. In this direction a task-involved pupil will then have a goal of action to develop mastery, to improve, and/or to learn and the demonstration of ability will be self-referenced as mentioned before. This same pupil will look at the acquisition of new abilities or the improvement of abilities he/she already had as a success. He/she will also look if the effort he/she had put in the task was good enough according to the improvement he/she made.

In contrast the demonstration of ability of an ego-involved pupil will be other-referenced. This mean one will then focus on the demonstration of normative abilities and will always compare his/her own abilities with others to access success. A pupil will then be motivated to participate in PE lessons because he/she believes that he/she will gain social recognition and increase his/her status through PE (Papaioounnou, 1990; White & Duda, 1994). Studies have showed that ego-involved people tend to experience anxiety at a higher level than task-involved people. The level of anxiety they are experiencing depends on their beliefs about their ability about a specific situation (Roberts, 2012). The anxiety to disappoint friends, parents, and teachers brings a heavy weight on a pupil's shoulders. Losing his/hrt status of "being the best", having to passing it on to someone else in PE classes can be for some pupils humiliating and the feeling of anxiety is therefore more present when a pupil is ego-involved than task-involved. When winning is everything, you do anything to win! Illustrated by this quote I can add that an ego-oriented individual is ready to do anything he can for the win, even if anything involves cheating and illegal behaviors.

In other words a task-oriented pupil thinks that hard work and efforts lead to success while an ego-oriented pupil thinks that beating others and showing others that he/she is better than them is the way leading to success (Roberts 2012). A task involved pupil will certainly

do his/her best and look at the result (of a 500 meters run for example) as feedback about his/her learning improvement and his/her level of fitness. While task-involved pupils will enjoy the class at its fullest, ego-involved pupils will be distracted from the enjoyment during participation in physical activities, focusing only on the outcome which will be defined as a success or as a failure. In other words an ego-involved pupil will show interest only for external factors; the activity in itself is not seen as important, only the outcome is. Ego-involved pupils will then gain satisfaction when they demonstrate success in the normative sense and please their parents, friends and other significant persons around them. In contrast Curry et al. found in 1996 that task-orientation predicts intrinsic interest in PE. An individual who is task oriented focuses on developing skills, learning new skills, and demonstrate mastery at the task while an individual who is ego oriented focuses on beating the other to boost his own ego. Task-oriented pupils are then less threatened by failure because their own ego is not directly related to the success of the task while ego-oriented pupils can become very anxious or discouraged and will be more likely to give up in the face of failure.

## **5. Motivational Climate**

Lloyd and Fox showed in 1992 that goal orientation (ego or task) is not stable. They claim that it can be changed by the situation people find themselves in. Therefore it is important to understand the impact of the climate which a teacher builds in his/her classroom to understand pupils' behavior. According to Treasure and Roberts teachers have an active role in the construction of children's perception of the motivational climate and consequently, the quality of children's motivation (1995).

Ames (1987) looked closer at how parents, coaches and teachers participated in and created different psychological climates around children, athletes and pupils. These climates influence pupils' attitude toward PE and their involvement in PE lessons. The PE teacher will give signals to his/her pupils through questions, ratings and feedback during games and exercises based on ability and success. Through signals, rewards and attention a teacher creates a motivational climate in which either differentiated or undifferentiated conception of ability will be a criterion to evaluate a pupil's achievement.

It is these signals that a teacher gives to his/her pupils that are seen as important when one tries to define motivational climate (Ames, 1987).

The first researchers who applied motivation climate were Ames (1992a) and Ames & Archer (1988). They wanted to understand how the structure and demands of the learning environment (referred to as the motivational climate) can evoke different achievement goals and motivational patterns. Motivational climate is, therefore, defined as a situationally induced psychological environment directing goals of action (Ames, 1992a). According to AGT there are two main climates. These are called mastery climate and performance climate (Ames, 1992b; Ames & Archer, 1988; Treasure & Roberts, 1995; Roberts, 2001; Roberts, 2012).

A mastery climate will turn a person's focus on the task, learning, high effort and individual progress. According to Ames and Archer's research (1988), a mastery climate connects success to progress and the improvement of one's skills. If a pupil has improved his/her technique, or has run in less time between the moment the pupil started the activity and the end of the activity cycle, this will be seen as a success. This same pupil will also focus on his/her effort and will decide if he/she is satisfied with the amount of effort he/she has put into the task after the task is over. A pupil will look both at the progress and the effort to evaluate his/her achievement. If the evolution was not as well as planned, this will be seen as a part of the learning process. Through the mastery climate the pupil acquires knowledge about the way he/she should act to improve his/her skills in a specific task. In this climate a pupil will work on the understanding of the approach to adopt, to do his/her best or to progress in a specific task. In this climate a pupil will not adopt the differentiated conception of ability through comparison with others, but will rather compare him/herself using earlier results, for example. Because the focus is on oneself, one should not worry about his ability not being good enough to reach the requirements imposed by the environment. Therefore there are bigger chances for adaptive behaviors.

In contrast to mastery climate a performance climate, also called ego climate, defines success as measurable by comparing one's results to others. Here is ability seen as essential to get good or bad results. The evaluation will result from looking at other's results and comparing them to oneself and abilities will determine the best. There is no place for mistakes in this climate as they are seen as negatives. In a performance climate, tasks are absent of variety and completed independently or in ability-based groups. The instructor or coach controls all decision-making power and fosters social comparisons by recognizing those who outperform others (Ntoumanis & Biddle, 1999). Public recognition of superiority becomes

then especially important to performance-oriented achievement. When an individual adopts a performance goal, that person's self-worth is determined by his or her ability to perform and achieve the normative standard of success; consequently, expending effort can threaten an individual's self-image when the outcome may be construed as "failure" (Ames, 1992c).

In school, PE adaptive learning and motivational patterns; for example, a positive attitude towards the activity, feelings of satisfaction, high perceptions of ability, the choice of challenging tasks, high intrinsic motivation, and placing a high value on effort and the process of learning; have been consistently associated with perceptions of a mastery climate (e.g., Carpenter & Morgan, 1999; Treasure, 2001, Roberts, 2012). In contrast, a perceived ego climate has been linked to less adaptive cognitive and affective responses, such as boredom, beliefs that ability rather than effort leads to success, a lack of enjoyment, and a negative attitude toward the subject matter (e.g., Carpenter & Morgan, 1999; Ommundsen & Roberts, 1999; Treasure, 1997; Roberts, 2012). As I mentioned earlier these climates influence how pupils think and act in a specific situation according to their interpretations of the signals given by the teachers and others around them. These interpretations affect the conception of ability and the involvement (task or/and ego) of an individual participating in an activity (Ames, 1987; Nicholls, 1989)

## **6. Research about motivational climate**

The growing body of AGT research in sports, work and educational contexts demonstrates the applicability and usefulness of this theoretical frame to the interpretation of PE motivation. Today studies can be found pertaining to how athletes, workers and students perceive the motivational climate in addition to their satisfaction in this climate.

School PE has been identified as the key resource for promoting physical activity (PA) among children (Chow, McKenzie, & Louie, 2008). To take full advantage of this opportunity, PE classes must strive to accomplish more than simply keeping kids active during class time. PA habits developed during youth have been associated with habits in adulthood (Robertson-Wilson, Baker, Derbyshire, & Côté, 2003), so creating a learning environment that fosters satisfaction and enjoyment in PA at an early age is crucial in developing a healthier and more weight-conscious generation.

Much has been written about teaching styles and classroom interaction in several countries and the results are similar for all studies of both gender and all types of cultural backgrounds. Can one say then that the effects of motivational climates are international, intercultural, and valid for all gender? In 1998, Duda & Hayashi suggested that more cross-cultural research was needed in this area. Since then more studies have been done and it still shows that whenever motivational climates are applied, the effects resulting from it are similar to the one described in previous studies. All of these results show a strong link between climates and associated psychological outcomes (Biddle, 2001). The goal of this part in this paper is to present some of these studies related to motivation in PE. Most of the studies dealing with the motivational climate are based on the arguments presented by Ames (1992a,b,c) and a study in classroom from Ames and Archer (1988). The arguments present how the different strategies influence the motivational climate. Many studies have manipulated the strategies in a climate and discussed the results. Students who perceived a mastery climate also reported many advantageous psychosocial cognitions, including higher enjoyment and satisfaction during PA (Ntoumanis & Biddle, 1999); high perceived competence and beliefs that effort leads to success (Cury et al., 1996); increased persistence and preference for challenging tasks (Morgan & Carpenter, 2002); and plans to be active in the future (Ntoumanis & Biddle, 1999).

Immediate effects on activity levels have also been associated with a mastery climate in children as young as four. In 2007 Parish, Rudisill, and Onge compared heart-rates and energy expenditure in preschool-aged children who participated in a physical play session. The leaders of the experimental group purposefully structured the environment to be characteristic of a mastery climate. Children in the experimental group recorded significantly higher heart-rates and played more vigorously compared to the control group of children in the non-structured play session (free play). Due to the increased prevalence of overweight and obese children, creating environments that increase activity levels consistently is a short term benefit that carries relevance and value in nowadays education systems.

Favorable changes in cognition and effects have also been associated with long-term mastery climate intervention programs. Morgan and Carpenter (2002) orchestrated a mastery-oriented intervention program for elementary school PE classes over a seven week period. In the experimental group, each teacher was given instructions regarding advantageous manipulation of the climate. The experimental group showed greater preference for

challenging tasks, increased satisfaction as well as a more positive attitude towards PA after the seven weeks had elapsed. Since high levels of satisfaction and cultivating positive attitudes toward PA in children are predictive of their attitudes in adulthood (Robertson-Wilson et al., 2003) as mentioned earlier, the gains made in this area are particularly meaningful.

Mastery climate has been intensively discussed by numerous researchers who recognize its positive effects. Performance climate, on the other hand, has been mostly discussed in comparison to mastery climate. Through these discussions it has been revealed that performance motivational climate has potentially damaging effects. In a study conducted by Solomon and Lee in 1997, over 800 elementary and middle school PE pupils were asked about the climate they perceived during class time, as well as their efficacy perceptions and other psychological cognitions. There was a disturbing correlation between a perceived performance climate in PE class and important psychological factors. Pupils who perceived a performance climate reported lower confidence-efficacy, decreased attention/concentration toward lesson material, and a reduced desire to participate compared with those who perceived the climate as mastery-oriented (Solomon & Lee, 1997).

The adults in leadership roles, teachers in schools, coaches on the field, and bosses at work greatly influence the formation and salience of the motivational climate. This is especially relevant to the processes that affect the enjoyment and satisfaction experiences of children, as those have been shown to be related to the lasting attitudes and future intentions to engage in PA. Therefore the role of teachers is crucial in a classroom and this is why they should be at the center of the focus when it comes to the construction of children's perception of the motivational climate and consequently, the quality of children's motivation.

## **7. TARGET**

Enhancing motivation by creating a climate showed through studies that certain structures were recognized as characteristic for both mastery and performance climates. It is clear though that a person that perceives a motivational climate which is focused on mastery will be more likely to develop adaptive behaviors. Epstein claims that various structural features of the achievement context can be identified as influencing a wide range of

motivational processes (1988, 1989). These structural features are seen as independent variables, but when put together, create a motivational climate of a context. Epstein coined the acronym TARGET to represent this several features she thought had to be considered to create a motivational climate. TARGET stands for Task, Authority, Recognition, Grouping, Evaluation, and Timing which Epstein refers to as the “basic building blocks” of the achievement setting (1988, p92). The TARGET guidelines were originally written for school classrooms and have been applied to youth sports and in PE settings (Ames, 1992b). These structures have been shown to influence the effort, persistence, cognitions, emotions, and behavior of individuals in PE (Ntoumanis & Biddle, 1999). Not only are these structures highly controllable by the classroom leader, but the effects of their adjustment can be significant.

<b>TARGET behaviour</b>	<b>Mastery climate</b>	<b>Ego climate</b>
Task	Self-referenced goals, multi-dimensional, varied & differentiated	Comparative goals, uni-dimensional & undifferentiated
Authority	Participants given leadership roles & involved in decision making	Teacher makes all the decisions
Recognition	Private recognition of improvement, effort and accomplishments	Public recognition of normative ability and comparative performances
Grouping	Small mixed ability & co-operative groups	Ability groups Whole class activities
Evaluation	Self-referenced. Private consultations with teacher based on improvement & effort	Normative & public
Time	Flexible time for task completion and maximum time to learn	Inflexible time for task completion

**Table 1: TARGET behaviours that influence motivational climate (Epstein, 1989; Ames, 1992b)**

According to Ames, in order to foster a mastery teaching environment the task structure should involve pupils setting their own personal goals focused on self-referenced improvement, multiple activities in order to reduce the opportunity for normative comparisons of ability, and tasks which are differentiated to optimally challenge all students. The authority structure should encourage pupils to be involved in decision making and leadership roles. Recognition and evaluation from the teacher should be given privately and be individually

based on effort and progress; further pupils should be involved in self-evaluation against personal goals. Pupils should be grouped into small mixed ability and co-operative groups and be given the opportunity to change groups both within and between sessions. Finally, the time structure should allow flexible time for improvement and maximize time to practice and learn.

In contrast, an ego climate would emphasize competitive tasks, teacher authority, not giving space for the students to express their wishes, normatively based public recognition and evaluation, homogenous ability groups, and time to practice would be inflexible (see Table 1).

Many would agree that it is the role of the teacher to increase motivation and develop interest for his/her pupils toward the subject of the class. One question has however been asked, and turns the attention to the validity of the positive individual results of using a mastery climate on a whole class, and that would be the topic of the optimal class size. The size of the Norwegian classes is regulated by a law called “Ny lovgivning om opplæring” and it limits the class size to 28 pupils per class from the first to the sixth grade and 30 pupils from the seventh to the ninth grade (Norges offentlige utredninger, 1995: 18) Unfortunately I did not find the regulation for the number of pupils in the 10th grade. This leaves the teachers with many pupils, each of them having a specific goal profile, such as high task and high ego, high task and low ego, low task and high ego and so on. Does everyone in a class benefit from the promotion of a mastery climate in a class of this size? Biddle (2001) tries to answer this question by explaining that goal orientations are not stable and consequently changeable. Effectively it has been showed through intervention studies manipulating the motivational climate (e.g. Lloyd & Fox, 1992) that goals can be changed after a period of intervention (6 weeks in Lloyd and Fox’s study on adolescent girls). This relation between individual goal orientations and motivational climate has not been a major subject for researchers. Therefore further research is required on this issue. What can be stated here is that the results presented till today give hope to teachers that motivational change is possible in the current classroom size.

## 8. Where I stand today

I have been interested in motivation since this notion has been introduced to me in 2008 during a course about sport psychology. Since then I have been reading and reflecting on what motivation is and how it can be improved, especially in PE lessons. In 2010 I presented my bachelor paper which dealt with motivation of PE teachers towards risky activities. I was curious to see if teachers try to avoid risky activity to not have to worry about eventual negative consequences due to an unfortunate accident. In that study I presented the self-determination theory (SDT) to understand how social pressure, such as administration, colleagues and friends, in addition to personal interests could affect a teacher's decision. Now I would like to understand how the teachers build their lessons in detail instead of looking only at the activities they propose to their pupils. I want to focus on how these activities are presented and in which purpose. When I started working with this project, and consequently this theory, in 2012 I found huge interest and use for it. I mean that AGT highlights interesting themes and the studies I read made me believe that this could be an interesting angle to look at the field of PE and how a teacher influences a group's motivation.

In Norway an average of 22% of students has a low sense of belonging and 18% participate rarely in academic and non-academic activities (Williams 2003). This number is better than many other countries, but that still means that in a class of 30 pupils more than 7 pupils feel like they do not belong there. In addition just fewer than 6 pupils participate rarely following those results. Should we be satisfied with these results? Is there anything teachers, schools, institutions, or parents can do to improve this situation?

This lack of engagement is also present in PE. This topic was recently discussed during a conference called «Kroppsøvingfaget i bevegelse – status og utfordringer» (Physical Education in movement – status and changes) which took place at the Norwegian school of Sport Sciences in Oslo in June 2012. A percentage of unsatisfied pupils toward PE has been presented. 30 percent of the pupils do not like, or even hate physical education they meet at school. Pupils are unfocused, not interested, and/or bored, which has an impact on their learning. How many times do pupils try to find excuses to not take part of the physical education lesson? Time goes, new activities appear, ways of teaching multiply; the role of the teacher is then to modify, adapt, improve his pedagogy as modernity comes along to fit with/to follow the pupils' interests and needs.

Intervention studies manipulating the TARGET structures to create a mastery focused teaching environment (Digelidis, Papaioannou, Laparidis, & Christodoulidis., 2004; Morgan & Carpenter, 2002; Solmon, 1996; Treasure, 1993) have described the enhancement of pupils' motivation and learning in PE settings. Specifically, pupils' tended to be more task oriented and less ego oriented; had higher levels of perceived competence, satisfaction and enjoyment; were less bored; preferred to engage in more challenging tasks; and believed success was the result of effort. In contrast, when the TARGET structures were more ego-involving, pupils' tended to be more ego oriented; had lower levels of perceived ability, satisfaction and enjoyment; were less interested in achievement tasks; and believed success was the result of ability and deception.

My project does not have the goal to judge if actual teachers do a bad or a good job but I wish to show that there are certain guidelines that help teachers to foster the ultimate environment for learning. One of my dreams as a future PE teacher is to see every pupil being physically active and giving the best of themselves, being aware of and enjoying what they are doing in PE. Unfortunately, as I mentioned earlier fewer and fewer pupils show interest in being active in PE lessons and in physical activity in general. Therefore we (the teacher's community), have to react and reflect on such topic in order to create an environment that would respond better to the pupils' needs than it does today.

AGT (Nicholls, 1989) assumes that both the performance and the mastery climate are present in a group, but it is the strategies that one decides to use that will get a climate to become more salient than the other. Teachers have an important role through the decisions they make to foster the climate that is optimal for learning in their classrooms. In the studies presented above and many more the mastery motivational climate has been shown as the ultimate climate and researchers encourage teachers to foster the mastery climate in their classroom. With this idea and the different studies around this theme I am wondering why these strategies work, how they are used by teachers and how they affect pupils. What does a teacher do in practice to build this positive environment? Is there only one way to do it or do teachers apply TARGET-model differently according to the groups of pupils they face?

This topic could be very relevant for teachers who wish to improve the way they teach during PE lessons. The goal is to offer the best conditions for learning to their pupils by

answering as best as possible to their needs. This study could have a direct impact on how teachers build their lessons, and how children engage in PE lesson. I asked myself a lot of questions through this process of reading and writing and I have tried to structure them into concrete questions for this research.

*How do teachers strategically make choices in the way they teach PE? How can these strategic choices be related to the assumptions about the performance and mastery motivational climate?*

To answer these questions I wish to focus on the different principles of TARGET model which are related to motivation and the learning climate. Therefore I emit three hypotheses:

- Teachers are generally task oriented.
- Teachers prioritize strategies promoting mastery climate in their classroom.
- Teachers use theories, earlier researches and the TARGET-model as guidelines to help them plan and teach their lessons.

## **2.Method**

In this chapter I wish to present my choice of method, the reasons of this choice and how I have proceeded to test my hypotheses and get answers to my questions. A description of the way I collected and analyzed the data will also be done now. Finally, I will discuss verification and ethical issues about the collected data.

### **1. Choice of method**

One important step in such a study is to find the method that fits both the study and researcher the best. Through the questions and hypotheses previously presented I wish to find out the strategies used by teachers to motivate their pupils. I want to discover also their opinions about the TARGET model and how they use it as a part of their classes to motivate their pupils also. This theme is open to both quantitative and qualitative methods; therefore it is necessary to have a closer look at what types of answer these two methods would give me and finally decide which method is more appropriate to my research according to my goals.

Qualitative research to start with, aims to gather an in-depth understanding of a phenomenon in the purpose to explain this phenomenon. This phenomenon could for example be the human behaviour and it could be explained by looking at the reasons that govern such behaviour. To do so researchers look at qualities that cannot be easily quantify. The qualitative method aims to understand by describing and reflecting on the entire situation (Grønmo, 2004). Qualitative methods deliberately put aside the quantitative aspect to focus on the deep analysis of the object of study. This means that the data collected have to be rich, contextual and detailed. Qualitative studies are flexible which means that questions in an interview for example can be changed during the collection of the data if the researcher feels like the change is necessary. The disadvantage of this flexibility would be that if the method is changed excessively, the researcher risks losing the perspective that was the starting point for the study and/or that in which drove him to use the method he chose in the first place (Ibid). Moreover, the conclusions resulting from a qualitative study are only accurate for the participants who took part in the study and cannot be generalized as the participants are few and subjectively selected by the researcher. Further conclusions about a possible generalization of the results would remain hypothetical.

Quantitative research, on the other hand, wishes to give a representative view of the entire population (Ibid). By recruiting many participants to take part in the research the results of the study can be generalized and considered as representative for the whole population. The quantitative method has a structured design which does not leave space for flexibility (Ibid). This means that the way in which data will be collected is usually fully decided before the collection of data begins. The collection then follows, not open for changes. The disadvantage of this research is that the focus is on special pre-decided variables excluding others which are judged as having minimal effects on the study. Nevertheless, all of these variables create the world in which we live, in which we evolve. The isolation of only certain aspects of the situation could be considered as a simplification of our reality.

In my study, I wanted to understand the role of the teacher in PE classes regarding the pupils' motivation. I wished through the data I was about to collect to get an overview on the personal thoughts and meanings of the teachers about this topic. Therefore I thought that it would be more appropriate to research qualitatively to get a realistic answer. I had to focus on the individual level to understand the mass. The qualitative method can be conducted in a manner to see if there actually are or are not similarities in the way teachers teach PE in Norway as well as determining if the TARGET model is used in their classes. Further, quantitative method could be used to see if the effects described by some teachers are shared by every teacher of PE. Here I will focus on the qualitative method for this study.

The main types of material used in qualitative methods are interviews and participant observations (Grønmo, 2004). It is possible to observe what kind of climate the teacher is creating in the class but would not give me details about why a strategy is better/easier to use in class than others. An interview gives me the opportunity to ask many questions which let the teachers explain his/her strategic decisions by giving examples from her/his practice.

My role as an interviewer was to guide the teacher through his reflection by asking specific questions which opened the discussion on a specific topic. Though the whole interview it was important to build a safe and supportive atmosphere based on trust to avoid false results (by false I mean not representative of what really happens in practice in PE lessons). Some teachers could think that I was here to judge what they do with their pupils and not want to answer me honestly, or that certain questions about one's opinion would make some teachers uncomfortable. In a questionnaire people are anonymous and feel at

liberty to answer honestly. In the case of the interview, one could be afraid of the consequences of one's opinion and hide these opinions by answering with what is socially accepted. By doing so this person would distort the results of the study and the study would make no sense. As mentioned, as an introduction to the interview it was stated that there are no wrong or right answers. Every answer is right as long as it represents what the interviewee truly think and really does in practice. Also I mentioned, earlier qualitative methods are flexible. I can insist during the interview, if I see that the teacher needs more time, to use more time to the answers this study is interested in getting from him/her. Deeper questions around the same topic can then be asked as well. This flexibly offered by a qualitative method will enable me to adapt the interview guide to the teacher I will have in front of me. Everyone has his/her own way of expressing himself/herself; some need more time or guidance than other. Therefore, the interviewer has an important role to play to get a full understanding of each of the interviewees.

## **2. The interview guide**

The interview guide was built with the goal to get answers to the questions this research is based on. According to Grønmo (2010), an interview guide contains the various topics that will be highlighted during the interview and what directions they should follow. From a theoretical frame, I decided how I wanted to organize and present the different topics I wished to discuss during the interview. Since the TARGET-model is the main focus in this study, I built my interview guide around this model. In this way the topics are presented in the same order as the model. I also added concrete questions which helped me to understand a teacher's meaning about these different topics. The interview guide was very useful and helpful for me having to lead the interview. During the interviews it felt reassuring to be able to double check if the main questions had been asked. It helped me to stay structured and focused during the whole interview.

My interview guide was developed to become a semi-structured interview guide (see attachment file nr 2). It is not an open discussion, yet not closed. It is rather structured with fixed frames. This way it was possible to come up with new relevant themes and ask additional questions if I heard something that I wanted to get more information about. This means that all the participants in this study got to answer all in all the same questions, but I

stayed open-minded to eventual changes and possible adaptations at all time during the interview.

My interview guide featured 8 topics. Each of these topics is covered with numerous questions and varying response formats, but mostly open-ended responses. Besides questions about various background variables (1), the questionnaire also includes questions about the teacher's strategies used in PE lessons according to the TARGET model (Task, Authority, Recognition, Grouping, Evaluation, and Timing) (2-7). Finally, questions about the teacher's goal orientation and his/her connection to studies and theories of motivation (8). The questions have been based on earlier empirical studies of motivational climate and the TARGET-model (e.g. Ames and Archer's research, 1988; Solmon, 1996; Carpenter & Morgan, 1999; Cury et al., 1996; Morgan & Carpenter, 2002; Digelidis et al., 2003). This being the theoretical framework of benefits of mastery motivational climate in PE contexts originally developed by Nicholls (1979, 1984,1989), Maehr & Nicholls (1980), Ames (1987, 1992a,b,c), and previous work on teacher's achievement goal in sport and education (Papaioannou & Christodoulidis, 2007).

The language used was English because being a foreigner in this country it was the best way for me to get comfortable and confident enough to be able to guide an interview. The participants were informed that the interview would be conducted in English beforehand and that they could withdraw their participation for the study at any time if they felt uncomfortable.

### **3. Pre-tests**

Before entering the process of interviewing my participants I wanted to make sure that my interview guide was adapted to them according to the language and the meaning of the words I used. I also wanted to uncover the proper way two people interact during an interview since it was my first time using qualitative methods to collect data, and consequently leading an entire interview. The person who helped me with the pre-test was one of my sports pedagogue colleagues from work. She studied physical activity and health; therefore I therefore thought she was a good candidate since she had similar education as my participants.

Kvale wrote in 2009 that it is important to make the questions of an interview clear. I can say that this pre-test helped me to make my questions more clear for my future interviewees. By pre-testing the interview guide, I got feedback on how people understand my questions and if I was going to get the answers I was hoping for with these questions. I did adapt a couple of questions according to the comments and feedback. Moreover, the pre-test interview showed me how to react to the situation of being an interviewer. In all, I felt well prepared, both on paper (adapting my questions) and in practice (training myself to react adaptively to the situation).

#### **4. The participants**

The choice of participants is an important part of the qualitative research interview process (Grønmo, 2010). Through reflection about how I wanted my research to be, I decided to focus on the teachers from lower secondary school who had PE as their teaching subject. I decided to focus on lower secondary school since it is the level at which I would like to teach PE when I am done studying.

To get in touch with PE teachers I decided to send e-mails to lower secondary schools in the area where I live. I fast discovered that it was not going to be easy as I first thought to find participants, but I was determined and was not going to give up on what I spent the last 3 years working on. I thus decided to extend my search field to five counties: Oslo, Akershus, the southern part of Oppland county, Buskerud and Telemark. Having a car, I thought I could drive and meet the teachers where they work.

I sent e-mails to over 200 schools explaining that I was a student writing my master's thesis and asking if it would be possible for them to send forward my e-mail to all their PE teachers. As an attachment file in these e-mails was joined a letter given to the teachers containing some information about me and my project; in addition to details about the interviews (see attachment file nr 1). My wish was to interview about 7/8 teachers who teach PE in the 8<sup>th</sup>, 9<sup>th</sup> and 10<sup>th</sup> grades with different backgrounds, some of them having PE as their main teaching subjects and other having other subjects in addition to PE.

I got e-mails back from teachers from different schools telling me that they were interested in my project and wanted to be part of it by letting me interview them. The teachers

gave me a schedule of their free time and then we agreed on a specific time to conduct the interviews.

## **5. The interview protocol:**

The teachers had the responsibility of ordering/finding a free room where we could have the interview at the time we both agreed on. Usually it was a meeting/group room in their schools where we could sit and talk without disturb by others.

I met each teacher 15 minutes before the start of the interview so I could get ready both physically, by opening my computer, preparing the table,etc.; and mentally by putting myself into the “interviewer mode”. One aspect of an interview is to be able to create a positive climate in which the interviewee feels safe. The fact that the interviews took place at the teacher’s working place, I am convinced helped to create the right atmosphere since it was a place they were already familiar with. I had with me tea/coffee/hot chocolate, homemade pastries and chocolate so that we could speak nibbling and sipping which created a relaxed atmosphere. Moreover the first exchange of words was about common subjects such as traffic, weather and so on. This eventually shawowed by a joke or two and a laugh followed instantly. During these 3-4 minutes of calming small talk, I saw the shoulders of my interviewees dropping down, their whole body relaxing. I took it as a sign that we were now ready to start the interview.

All interviews started with a short presentation of myself and a little summery of what was going to happen. That is when I starting talking in English so while listening to the presentation, the participants got time to prepare themselves to switch over to the English language mentally. They could then turn their brain into “English-mode” as I joked with most of them. Then we discussed the tape recorder being presentand that it should not be a hundrance to their openness. As well as underlining the anonymity of the interview.

Since I had to travel to meet the teachers, I tried to have 2 interviews per day if I knew that teachers were from the same areas. The interviews were between 35 and 55 minutes, depending on how detailed the teachers' answers were. Some were more open than others and for some it was easier to summarize their reflection and thoughts. This was

something I was prepared to face even before the interviews started. According to Kvale (2009), the interviewer should be prepared that it can be more difficult to interview some participants than others. He also adds that the interviewers should motivate and assist the participant in order to facilitate the information to come out. I chose to use eye contact and nod my head to show my interviewees that I was listening and following their thoughts. Even if I found what all of them were saying very interesting, I tried to stay neutral. As to not show my opinion about the questions and the answers they were giving me because this could sway the data. I found this aspect of the interviewer's role very challenging. I tried to reward the answers by saying "very good answer", "good point", "hmmm," etc even if it was not exactly the answer I was expecting. I also used this reward system in between questions to stop the teacher if I saw that he/she was turning his/her attention on something rather than the question. In this way I could regain his/her focus by reformulating the same question which had been left averted. I think I can say that this was the thing I found the most difficult during the interviews: show interest, not too much but enough to motivate the participants to fully answer the questions.

All in all I can say that I am satisfied with all the interviews, and I do not think I could have dug deeper after all the questions I had already asked.

I used the interview guide during all of the interviews. It helped that I had read through it many times before I started the collection of data. That way I looked at the interview guide to check the main themes and the order I had to follow, and then I was just going through the questions with the interviewee which I knew by heart. The more interviews I had, the less I was looking at the interview guide. This way the exchange of information became more natural in the way that it felt like having a discussion, even if I had control over where the discussion was going.

The interviews ended with me asking if they had anything else they wanted to say and if they thought that the interview went well. I never got negative reactions about the way the interviews went. I then expressed my gratitude for their participation in my study.

After I was done with collecting the data, I started transcribing. I then notice that I was missing some questions which would maybe have given more meaning to the interview. But as I mentioned earlier, the more interviews I held, the better I responded to the situation.

As I got further into the process, the optional questions got more detailed. This could also be related to the fact that some people talk more than others as I discussed earlier in this part.

A relevant experience I had in the process of interviewing my participants was that one should not interview many participants the same day. I became sick with a long term illness right before I conducted the interviews. The illness made me feel exhausted faster than when I am healthy. I tried to have two interviews per day since I had to travel by car to get to the meeting point, but I can say that it has been very challenging for me to drive and conduct the interviews. Moreover, I did not have much time between the interviews, and I really felt the time pressure. When I got out from the first interview, I felt like my brain was still in the room with the teacher, going through what he said, beginning to analyze the conversation. Before I had the chance to take a break from this, here I was sitting in front of another teacher for the next interview. After the second interview I felt like sleeping and it was really hard driving home. Maybe this would have happened only after the fourth or the fifth interview if I would have been healthy. The situation I was in was for sure not ideal and I know now for further research that it is crucial to give myself more time. When one has to sit and interview a teacher about his/her way of teaching, this person has to be clear and able to follow and react to the answers. This aspect is definitely something I would have to work on if I decided to conduct another study in the future.

## **6. Transcribing**

After conducting the interviews I sat down with about six hours of recorded data which provided me with the basis for further analysis and interpretation. Through transcription I was able to write the depiction of seven oral interviews in written form. Some decide to give the recorded data to another to get them transcribed. I decided to do it myself because it would give me the possibility to analyze and get to know with the interviews. In addition, this process would give me the possibility, as a researcher to develop the analysis through structuring and inserting my own comments if needed. When the pieces of information are structured in written form, it is then easier to analyze and interpret the data later on (Kvale, 2009). At first it seemed to be an easy job to write down what the teachers said. This task showed to be more difficult than originally thought. Transcription is not only a technical process, but it is interpretation process in itself (Kvale, 2009). When information is

transcribed it is subjected to be personally influenced by the transcriber who will set guidelines for how the data will be read and interpreted afterwards. Where does the sentence stop? When is there a break? Therefore, I decided to include in my transcription “mhm” and “ehh” and also use dots when the interviewee takes a break to think (...). This way I feel I get a full understanding of the statements made by the interviewees.

## **7. Analysis**

The analysis of the data started when I made the interview guide. The interview guide was structured and categorized in order to highlight different themes, like grouping, evaluation and time in PE for example. The questions were then formulated according to what I wanted to investigate.

There is no standard way to analyze written texts, as Kvale mentioned in 2009. What I wanted to investigate in this study was how teachers motivate their pupils; I therefore had to focus on each and all of the teachers I interviewed individually to get an outlook of their practices at first. Later on I tried to understand why teachers from different schools do things differently. There were no good or bad answers because all the answers, weather they fit with the AGT's point of views or not were subjects of further discussions.

After the transcription process I sat down with 64 pages of written text to further analyze. The answers were already categorized and structured due to the interview guide structure. I had to then read through the interviews again and again, using codes, symbols and notes to increase my understanding of the teachers' answers. I was looking for central and distinctive ideas. These would help me to identify eventual tendencies and connections between the seven interviews (Grønmo, 2004).

## **8. Verification**

The collection of data is a process. This process can be considered a production process in which one produces the data needed to highlight specific issues. The verification of the data investigates whether the quality of the data in the study is good or bad according to what it is used for and measure the reliability and the validity (Grønmo, 2004).

## 1. The data quality

The quality of the data should be defined according to what the data are going to be used for. The purpose of the data is to highlight specific issues. These specific issues are named in the main question of the research. *How do teachers strategically make choices in the way they teach PE? How can these strategic choices be related to the assumptions about the performance and mastery motivational climate?* In this paper, these are the questions which refers to the specific issues I wish to investigate with this study. In 2004, Grønmo describes five assumptions which help to determine the quality of the data.

As a first feature to Grønmo's five assumptions, the data have to be based on the principal of the obligation of truth. This means that the collected data have to represent actual facts and reflect true information related to the study's issues. The interviewees were speaking freely and answering my questions with details and facts about their everyday practice as PE teachers. During the interviews, I stayed as neutral as possible in my interaction with the teachers in order to not influence their answers. During the transcription of the interviews, I did my best to transcribe objectively and as detailed as possible all the answers.

Secondly, the notions, concepts and language used for the collection of data should be as precise as possible. One should in addition use specific terminology related to the issues of the study. By pre-testing the interview guide, I got feedbacks about the language used in the questions and consequently adapted it to suit better the interviewees. Moreover, all the questions present in the interview guide are related to motivation in PE, or help to understand how teachers motivate their pupils in PE which is the main issue of my study. The fact that the interviews were in English can be a topic of discussion. Effectively, the teachers had to express themselves in another language than their mother tongue, thus potentially swaying the results due to lack of communication skills or vocabulary to express their true practices and feelings. As mentioned earlier, being foreigner in this country, this was the best way for me to get comfortable and confident enough to be able to guide the interview. Moreover, the participants were informed that the interview will be in English beforehand and could withdraw their participation for the study at any time.

The third point that Grønmo takes up is about the generalizability of the data. He says that both the number of participants and the method to select the participants should be

adapted according to the issues of the study and the hypothesis. My participants were not a random selection among the population, but a random selection for those who teach PE in Akershus, Telemark, Buskerud and Oslo counties. This means that my results could be transferred to others schools. Nevertheless, the schools I visited were a little special when it comes to the organization of the subject. It could be brought up that the schools were mostly in urban areas as well so the data could possibly be tailored to a more urban area rather than a rural. If I had had schools from rural areas, maybe the answers would have been different than the ones that were collected. Therefore, the generalizability of the answers I got can be discussed. As I see it, after the analysis of the data there are several answers which can be transferred to other schools, but the answers related to the activities, tasks and time for example cannot since it differs a lot from one school to another.

Fourthly the types of information should be adapted to the notions and concepts arising from the main issue of the study. The notions and concepts were categorized and structured in the interview guide, which was designed according to the main issue of this study. All the answers I got from the interviewees are related to each and all of these categories.

Fifthly the collection of data itself should be done in a proper way; this being done by using adapted and recognized methods in order to minimize problems during the collection of data. The researcher should avoid the data being affected by the research method or the protocol to collect data. The choice for the qualitative method and the design for the interview guide have been thought through after many hours spent reading and rreconfirring what would serve this study best.

The qualitative interviews I conducted were useful and helpful to find answers to the questions of my research which deals with the way teachers motivate their pupils in PE at lower secondary schools in Norway.

## **2. Reliability**

Reliability refers to the consistency of a study. If the collection of the data and the investigation give consistency data, then the reliability is high (Grønmo, 2004). In practice, reliability shows that my findings could be repeated by other researchers at another point in

time using the same method as I did. Nevertheless in qualitative research, there is no expectation of replication since it can be difficult to repeat the collection of data in the exact same way. Reliability is therefore hard to measure, but it is still a useful starting point for reflection, discussion and evaluation of the study (Grønmo, 2004).

The reliability of the transcription can also be discussed. As I mentioned earlier when information is subject to be personally influenced by the transcriber when it is transcribed (2.6). Two people could transcribe and interpret the same recording with two different meanings. The analysis of the collected data are based on my understanding and interpretation of the statements and answers which my participants gave me. This is though something that is virtually unavoidable considering every person has a bias.

### **3. Validity**

Validity refers to how good the data are according to the main issue of the research. Validity is described as the degree in which a research study measures what it intends to measure (Grønmo, 2004). Validity in my research depends on how my observations reflect the phenomenon I intend to get more knowledge about. If the collection of data gives results which are relevant for the issues of the research, the validity is then high (Grønmo, 2004). Even if the interviews turned into discussions eventually, I was always aware of what I needed to focus on and what answers I needed to get for the data to be relevant for this study.

Through the transcribing process I listened to the recordings several times for the transcription to be as exact as possible. It could have been interesting to have a session where I observe the class of the teacher I interviewed to see if the answers I got from him or her reflect what really happens in practice. Unfortunately I did not have the resources to go this far in my investigation.

To optimize the validity of my transcription I could also have sent the transcribed data to the teachers I interviewed to let them read through their answers and give me feedback. This way I could have known for sure if my transcription matched their answers. I decided not to do this because I was afraid that they could change their statements if seeing that their answers did not fit the social requirements. During the interviews it happened that I had to step in and mention that I wanted the teachers to answer honestly with what they do and not what they think it is right to do to refocus on what each teacher really does instead of hearing what the expectations of their school, the institution, and the parents are. Standard

answers about what they think they are supposed to do are not what I was looking for in this investigation. I therefore decided not to send the transcribed data to them for reviewal.

## **9. Ethics**

Qualitative researches have to deal with ethical obligations regarding the participants' privacy. I did collect information about the participants' thoughts, opinions and choices. Ensuring the anonymity of the participants and the confidentiality of their data were required. Confidentiality means that the researcher cannot publish information that would reveal the participants' identity (Kvale, 2009). The participants were contacted by their schools and they then contacted me on their own after they decided they wanted to take part in my study. The information letter they got from their school explained that they may subsequently withdraw from the study at any time without penalty or consequences of any kind (attached file number 1) if they felt compromised or uncomfortable. They also were informed that the names used in this paper would be fictional and that the information collected during the interviews would not allow anyone to identify them personally. I did not collect any sensitive information about the participants. My project was also approved by the Norwegian Social Science Data Services (NSD: attached file number 3) before the data were collected. Because I got sick in the process, I had to extend the date in which data collection was to take place. This extension was also approved by NSD with whom I have been in constant contact during the whole writing process.

# 3. Results and Discussion

This study was planned, conducted and interpreted using the three hypotheses which constantly have formed the basis to answer the main research question.

- Teachers are generally task oriented.
- Teachers prioritize strategies promoting mastery climate in their classroom.
- Teachers use theories, earlier researches and TARGET-model as guidelines to help them plan and teach their lessons.

Before any further comments or debates, it is important for me to explain some thought I had and have about this study. My main goal for this research question was to look closer at how the teacher's choices affect the class in terms of motivation in PE. Because I decided to focus on the teachers, I know how they are preparing and conducting their lessons. Nevertheless, I do not know how the pupils perceive these lessons. What I heard was what teachers do and how they think it affects their pupils. This way I could identify strategies that teachers consciously used to reach their/the school's/the government's goals when it comes to PE.

This chapter will focus on the teachers' views on how they build their lessons and how their pupils respond to their lessons. All the interviews are encoded so that the interviewees are presented with a name which is fictive in order to ensure their anonymity.

## 1. Participants' Presentation

I have had interviews with seven teachers teaching in lower secondary schools. In this presentation I will say a little bit about each teacher and their background such as their education, the amount of years they have been a PE teacher and their practice of sport outside of the school. The age of each teacher will also be revealed to see if there is a link with their strategies and choices.

### **Geir**

Age: 62 years old

Teaching experience: 39 years.

Education: school teacher.

Subjects taught: several subjects, including PE

Level: 8<sup>th</sup> to 10<sup>th</sup> grade

Physical activities: has been part of clubs and done competition when he was younger, but now he is focusing more on staying fit.

## **Magne**

Age: 46 years old

Teaching experience: 20 years.

Education: PE teacher

Subjects taught: PE

Level: 1<sup>st</sup> to 10<sup>th</sup> grade

Physical activities: has practiced sport at a competitive level before but not anymore.

## **Tor**

Age: 30 years old

Teaching experience: 3 years.

Education: school teacher and PE teacher

Subjects taught: several subjects, including PE

Level: 8<sup>th</sup> to 10<sup>th</sup> grade

Physical activities: running, strength, gymnastics and sometimes floor hockey, but he is not registered in a club and he does not take part in competitions.

## **Sondre**

Age: 46 years old

Teaching experience: 20 years.

Education: school teacher.

Subjects taught: several subjects, including PE

Level: 8<sup>th</sup> to 10<sup>th</sup> grade

Physical activities: does not practice any sports regularly but mostly follow his children as they practice sports. He works out on his own.

## **Runnar**

Age: 35 years old

Teaching experience: 10 years.

Education: bachelor in PE and one year with sciences (chemistry, biology and physics)

Subjects taught: several subjects, including PE

Level: 8<sup>th</sup> to 10<sup>th</sup> grade

Physical activities: has competed in football before he had to stop because of health problems. He now practices more outdoor activities such as fishing, hiking, hunting and cross country skiing but not attached to any organizations.

## **Lars**

Age: 49 years old

Teaching experience: 20 years.

Education: bachelor and master in English + courses to be able to teach PE.

Subjects taught: several subjects, including PE

Level: 8<sup>th</sup> to 10<sup>th</sup> grade

Physical activities: he does jogging everyday and works out on his own. He does not compete.

## **Petter**

Age: 47 years old

Teaching experience: 8 years.

Education: bachelor degree combining several subjects such as philosophy, sociology and mathematics. He has taken extra courses to be able to teach PE and other subjects.

Subjects taught: several subjects including, PE

Level : 4<sup>th</sup> to 10<sup>th</sup> grade

Physical activities: he does climbing and skiing but not at a competitive level even if in climbing he is part of a club.

## **2. The School's Organization:**

I learned during my interviews that none of the schools I visited have the same organization when it comes to PE. The amount of hours, the arenas, the numbers of teachers and the numbers of pupils varies from one school to the other which I believe affects the way

teachers plan and conduct their lessons. Therefore, I wish to present and discuss here the different types of organization that I heard of during the interviews.

The average amount of time spend in a PE class per week is 120 minutes. Most of the time used for something called a double lesson. A double lesson means that the pupils have PE once a week for 120 minutes, including changing and showering. Nevertheless, I also heard during the interviews that some schools have a different way of allowing time to PE. At Magne's school, pupils have PE one hour four times a week. Runnar and Sondre, on the other hand, have PE three times a week for forty five minutes each time. How come it differs so much, with some schools having double the amount of time compared to other schools?

The government, through setting up the curriculum for PE, informed the schools that PE should be taught for at least 223 hours from 8<sup>th</sup> to 10<sup>th</sup> grade (each hour being 60 minutes) (LK06, 2006). According to the regulation for school and education a year constitutes between a minimum of 38 and a maximum of 45 weeks (2014). When I divide 223 by the number of the weeks in a school year, I get from 1.5 to 2 hours a week of PE. This is, as I mentioned, the minimum amount of PE every schools in Norway should offer to their pupils from the 8th grade to the 10th grade. Is this enough? Why do some schools decide to have more? This topic will be discussed in a chapter bellow which focuses more on time allowed to PE.

The number of teachers and pupils during one lesson is also something that varies from school to school. With my experience of teaching and studying PE for many years I had always heard the theory of one teacher having one class at a time. But in practice, it is not always like that. Effectively, four of my seven participants have one class at a time, and teach it on their own. Nevertheless, I also have teachers that do things differently like my three other participants. Petter works in a small school with few pupils. Therefore he decided to group 8<sup>th</sup>, 9<sup>th</sup> and 10<sup>th</sup> graders together to have PE each week. This way it makes a class of 26 pupils with two teachers sharing the lesson. Lars works also with another teacher for each lesson. They decided to group two classes at the time to have PE together. Lastly, Magne is the head teacher for PE in his school and has four other teachers coming to his school each week to teach to 120 pupils at once. All 8<sup>th</sup>, 9<sup>th</sup> and 10<sup>th</sup> graders have then PE together, sometimes all together, sometimes divided with one or two teachers each.

Honestly, when I heard Magne's way of teaching PE, I could not even imagine having 120 pupils in one gym. He said himself that it took time to adapt both for the teachers and the pupils, but he is satisfied with the results.

My goal here was to show that schools try different approaches which sometimes are in favor to PE and perhaps sometimes not. These differences helped me to understand the different strategies used to teach PE in these unique or special situations.

### **3. Teachers' Orientation**

This part focuses on each teacher and tries to identify the teachers' goal orientations. Teachers greatly influence the formation and salience of the motivational climate. It is therefore important to consider their own orientation when it comes to understanding children's perception of the motivational climate, and consequently, the quality of children's motivation (Treasure & Roberts, 1995).

*"It feels good to be good at something. [...] it is actually not being better than the other one but if I do it good, then I'm satisfied."* -Petter.

To the question about the importance of outperforming other teachers, the majority of the teachers answered that what really matters to them is the job they do; if they do well, not compared to the others, but more according to how much they help their pupils, then they feel satisfaction. In Sondre and Runnar's schools, gatherings for PE teachers are organized regularly during the school year. These gatherings are used to exchange tasks and solve problems if there are any that arise. Runnar says that he and his colleagues work really close together as a team, and there is therefore no need for competition according to him.

*"[...] less activities the others can do, the more I have to do."* -Magne.

Only Magne distinguished himself from the others on this matter which attracted my attention. He says he is feeling good when he feels he is as good as other teachers. This tells me that he compares himself with his colleagues. Indeed in Magne's school if a teacher can't do as good as another, then the "best" one will have to take more classes. He states that the

desire for the 8th, 9th and 10th grades to have equal education during their 3 years at the lower secondary school. It is therefore that a teacher good in basketball for example will be teaching basketball to all the grades. If another teacher wants to teach basketball, then he/she has to be better or at least as good at teaching basketball to get to teach these classes. How long can a teacher work with an activity before someone tells him that he cannot teach it anymore? Don't they believe in improvement? Teacher can also improve their skills in teaching. This tells me that Magne works in a more competitive environment than any other teacher I met in this study.

When it comes to trying new things, innovating their teaching methods and using new activities and tasks for teaching PE, the majority of the teachers admit not doing it frequently. Because of their experience as teachers as most of the teachers I interviewed have taught for between 10 and 20 years, they reuse what they have planned and done in the past.

*"I want it to be safe and sound."* -Sondre

Here, Sondre explains that he likes to have control over his lesson and plan/do/teach things which he knows work with the pupils. He admits to trying small, new things sometimes, but he considers himself as being "on the safe side most of the time."

According to Tor, new tasks and activities can be challenging for him to teach. He claims not wanting to use it if he cannot manage/understand it fully himself because he wants to be able to explain it and show it to his pupils.

Lars, on the other hand, found a solution to these challenges. He takes them out of the school. If there are activities he wants to use with his pupils, but does not feel that he has enough knowledge about, he tries them during his free time. During the interview he named ice skating. He improved his skills and experienced the learning process of ice skating outside of the classroom until he felt ready to use it in class.

Teachers also mentioned that they can take part in seminars and courses which help them to update their knowledge and face pupils' needs better. This shows that the environment where they work believes in improvement in teaching and therefore schools sign up their teachers to take part in seminar and courses. During these gatherings, teachers can learn about new activities, new ways of teaching, but also refresh the knowledge they have from their education and/or their practice.

Nevertheless, it can happen that teachers avoid to teach some activities or tasks. Petter, for example, told me about his experience with dancing. He says that dancing is complex and, because of his past, he would rather give this activity to his colleague. Petter usually teaches with another teacher who is willing to take this activity. Runnar also mentioned that it has occurred to him to bypass teaching gymnastics. Nevertheless he found a teacher in his school who was willing to help him with this subject. Geir admitted, as well, doing more things that he feels good at and is comfortable with than those activities in which he feels inferior. Lars says, however, that the competence aims of the pupils should be the focus. According to him, if a teacher avoids an activity, and this results in not meeting the competence mentioned in the curriculum, then this teacher is not doing his job. Therefore, he morally cannot drop activities or tasks, even if he does not like them or does not feel comfortable with them.

Magne, who teaches PE with 4 other teachers, says he does not have to teach the activities and tasks he avoids because another teacher can take them. They discuss who will do what beforehand and this way they can choose what they are most comfortable with and can choose to avoid what they don't really feel comfortable teaching.

All teachers mentioned asking for help when it comes to activities and tasks they don't feel comfortable enough with to teach it to their pupils. The help can come from colleagues working directly together with them, like Petter and Lars or from other sources such as pupils, other PE teachers or other teachers from their schools in general, like Sondre, Runnar and Tor. This tells me that the teachers I interviewed are not afraid of being viewed as incapable by their colleagues. If this were the case, they could go to others and ask for their help.

All teachers who ask their colleagues for help (names mentioned above) insist on the fact that they do not give away their lesson and go do something else. They usually take part in the lesson. Both to help the other teachers who steps in to help and to learn more about this activity or task so that they will improve their skills as teacher.

On the other hand, there is Magne's school, where the teachers split the activities and do not have to teach activities they are not comfortable with. This way they do not get to see or learn how to teach these activities. I believe it takes away the challenging tasks from their everyday teaching, which could ultimately affect their own motivation. Effectively according to Ames, challenging tasks are important to foster a mastery motivational climate, and consequently increase motivation toward the tasks and the activities (1992b).

All teachers defined effort as an important part of the learning process in PE. Runnar and Magne used the term “key factor” for success and good evaluation. This tells me that all teachers recognize the important roles effort and how hard work have in regards to improvement.

*“Everybody can do something, everybody can improve their abilities.” -Geir.*

Here Geir says that all of the pupils start at the same point, then they discover from an early age through learning that they get a wider and more refined range of abilities. He says that pupils being active outside of the school have an advantage over the pupils who are not active on their own because those who are being active learn and get the abilities before the activities are presented in PE, thus fine-tuning these abilities while the other pupils are just learning them. Lars uses the term- “departure point” to describe where the pupils stand at first when an activity is presented for the first time in PE. Every pupil comes to PE with their background of an active or non-active life. The experience of being active in primary school, and with family and friends will have given them a different set of abilities. The goal of the school is then to improve these abilities. In this learning process mistakes are considered instructive. Pupils learn from mistakes about what went wrong, why it went wrong and what to do to do it better next time. All teachers mention that trying is important. They say if pupils do not try, they do not learn. Because they are learning, they cannot do everything, and therefore it happens that they make mistakes. All teachers mentioned sharing with their pupils that it is fine to make mistakes by saying “we have to allow mistakes” (Tor), by building “a social environment that allow mistakes” (Petter). The teacher’s reaction to pupils’ mistakes is to make the pupil try again.

This tells me that abilities are something someone learns and improves on. Not something pupils are born with. Moreover, it tells me that teachers are encouraging their pupils to work hard, overcome and learn from their mistakes to reach their goals and about the teachers' orientations. The teachers I interviewed associate ability with learning and personal improvement through effort, which tells me that their conception of ability is undifferentiated according to Nicholls (1984;1989). Moreover they think that hard work and efforts lead to learning and improvement, which tells me that they are task oriented in their teaching and not ego-oriented, thinking that beating others and showing others that one is better than others is the way leading to success in PE (Roberts 2012).

As individuals, it is not easy to identify what orientation the interviewees are because one can shift one's conception of ability to better suit the situation one is in (as I presented in chapter 1.3). It is then possible for the teachers to hold a differentiated conception at one task, such as wanting to beat his colleagues and do his/her best to do so, and still hold an undifferentiated conception at another task, like being concerned with improving one's ability to teach PE.

#### **4. How to improve teaching skills**

At the end of the interview I decided to focus my attention the teacher's connections to researches, publications and theories of motivation. I was interested in discovering how teachers keep updated and improve their knowledge about and skills of teaching PE. I kept this theme for the end of the interview as to not give hints to the teachers about the purpose of my investigation and to not influence their answers to the other questions. Nevertheless I think it is wise to discuss their answers here to get a better understanding of the strategies they describe and use to teach PE.

##### **1. Teachers' connection to studies and theories of motivation.**

When I mentioned motivation's theories, they all agreed having heard that notion at least once some point in time. As I mentioned earlier (1.1.), there are many theories dealing with motivation. None of the teachers I interviewed are very involved in this field though and none of them read regularly about this particular topic either. When I mentioned the TARGET model (1.7), it did not ring a bell for anyone. None of them had heard of it before or none of them could recall at least.

##### **2. How do teachers keep updated?**

Teachers have little to no time to read publications and studies while at work as I found out during my interviewed. During a normal week, a teacher shares his time between two main things to do: the time spent in class teaching the pupils and the time spent planning and evaluating. I asked all teachers how long they worked a week and all answered between 30 and 43 hours a week, except for Geir who has a reduced position since he is retiring next

year (30-35 hours for Magne, 40 hours for Tor, 43 hours for Sondre, 40 hours for Runnar, 35 hours for Lars, Petter says not being able to count because not all weeks are the same: “some weeks are easy and other are mostly work”). I then asked them if they have time to read articles and publications in this working time. They all answered negatively. They have to do that on their free time.

Therefore most of the teachers I interviewed haven't heard or read about motivation theories since they studied. This means that it has been upwards of 20 years ago for some. In the last 20 years theories have multiplied with several points of view which have an important impact on today's practices and on how to teach in schools.

Sondre and Runar mentioned however that teacher gather where teachers can discuss problems they meet in their classes. This way they can give tips to each other and find solutions to their problems.

Lars, Sondre and Petter mentioned that they have been to courses and take regularly part in seminars to update their knowledge about teaching PE.

Sondre mentioned that while planning his lessons, he checks tasks and exercises in books or on internet sites such as YouTube to get new ideas.

Petter said reading about studies or tactics is something he turns to when his classes need it. If he is facing a problem and needs tips to fix it then it happens that he reads articles or consults for help.

This tells me that the teachers, after graduation from teacher's school get little or get no information about the news studies about motivation. This is an interesting point to keep in mind when it comes to discussing their answers about the strategies they used. Are they using old strategies? Were these learned during their education, which could mean 20 years ago for some? Or have they adapted the way they teach PE while learning through practicing teaching?

## **5. Task**

### **1. Activities**

All teachers presented a list to me of various activities including indoor and outdoor team sports, individual sports and games used to teach PE. Most of the schools I visited had sports hall close to or in the school, a football field right outside the school's doors, tracks to teach athletics and a forest nearby. These arenas give the possibility for many and various

activities in the subject of PE. The pupils are usually outside in the autumn and late spring doing orientation, running, playing rugby, Frisbee, baseball and/or football. Some schools, like where Geir is teaching also have access to an outdoor handball field and an outdoor basketball field and also a sand volleyball court. He says using them all and that the pupils like the changes. In the wintertime and early spring the pupils are usually inside doing gymnastics, team sports such as floor ball, handball, basketball, volleyball, individual training, building strength and dancing. Winter activities are less used in PE. As some teachers mentioned, the winters have not brought much snow in the last years so it makes it difficult to plan and organize activities (Petter, Tor and Geir). Other schools have other reasons to not practice winter activities: “*Pupils are coming with bus [...] it is hard to bring it (the equipment: ski clothes, skies, shoes and poles) here on a day basis.*” Therefore Runnar’s school and many other schools group all winter activities and have a “winter day” during the year where the whole group of schools goes outside. During this “winter day” pupils can sign up to go cross country skiing or downhill skiing and winter activities are held. Besides that particular day, winter activities are not practiced on a regular basis.

Magne tried another approach to winter activities. Every year he plans a period of 3 to 6 weeks for skiing. “*We don’t know when we will have snow, so when the snow comes and it is cold, we start with the period of 3 to 6 weeks outside*” he says. This means that he has a plan for skiing and is ready to take a break from the other activities to go outside whenever the weather suits his plans. This also tells us something about Magne’s ability to adapt his initial plan as I will discuss in a further chapter ( III.8.). Petter also “*make(s) a play area for skiing*” using a field right beside the school where they do jumping and different types of exercises. These winter activities depends on the winter and on the snow conditions. Therefore it is difficult to say how long and how often these activities are held. All I got to know is that they take place sometime in the winter when the weather is favorable to it.

According to Ames, to foster a mastery teaching environment the task structure should involve having multiple activities in order to reduce the opportunity for normative comparisons of ability, and tasks which are differentiated to optimally challenge all students (1992b). As summarized, here I can say that pupils go through various activities during their three years of lower secondary school, being active both in and outside. Usually the activities are presented to the pupils for an average of a period of 3-4 weeks each, which gives the opportunity to all pupils to exercise and to learn about several activities. The differences that exist between schools in regards to the activities presented can be due to differentiated access

to facilities. Some have more and some have less access, but all of them have at least one arena inside and one arena outside. The activities are often chosen by the teachers who often work together with their PE colleagues to plan the whole year. This will be described and discussed in the chapter dealing with authority ( III.4).

The tasks chosen for each activity are planned by each teacher. There is a variation between exercises (technical, strategic) and play. Usually the PE lesson starts with a warm up session and then the pupils practice technical aspects of the activity they are in and then play using what they just learned. The lesson then ends with stretching "*if there is some time left*" (Sondre). "*I can pick tasks according to their level [...]*." Runnar explains here that he is choosing the tasks he presents to his pupils according to his pupils' level, considering he knows the pupils from before. If he does not know them, then he starts the activity by teaching them the basics. He is convinced that teaching the basics will benefit all of his pupils. "*It is when you do the easy good that you are going to be a good player,*" is a phrase he uses with his pupils often; using, of course, examples from famous football players who train technique every day. This is Runnar's way to adapt the activity to all pupils. This way the tasks challenge all pupils, not being too hard as to not discourage them, not being too easy so that they are bored.

## **2. Goals**

According to Ames, to foster a mastery teaching environment the goal should focus on self-referenced improvement (1992b). The goals for the activities, tasks and for the subject of PE in general are revealed in the curriculum for PE which each school in Norway, public and private should follow. The goals presented in the curriculum are all self-referenced. As it is mentioned in the purpose of PE "*Målet for opplæringa er at eleven skal kunne ...*". (KL06; 2006). This means that for each subject in PE (sports activities, outdoor life and exercise and lifestyle for 8<sup>th</sup> to 10<sup>th</sup> grade for example) the curriculum lists the competences which each pupil should develop and aim for while practicing PE. Furthermore the curriculum also mentions that "many competence aims for the subject take pupils' own physical limitations and skills levels into consideration for assessment"(Curriculum for PE; 2006). This tells me that the pupil is in the center of his/her own learning process. It is the progress of one's skills that will be looked at instead of comparing with others. The message sent from the government to the teachers through the curriculum is in theory relevant to build a mastery

climate in PE according to Ames. This curriculum is used as a guideline for teachers which helps them build their lessons to reach these competences by the end of the 10<sup>th</sup> grade.

Nevertheless, this curriculum is not always well understood and easy to use according to the teachers I met in this study. As several of the teachers I interviewed mentioned, these goals listed in the curriculum, are wide and they need to be “*broken down*” to more concrete goals as Runnar explains. He uses the example of swimming to iterate his views. In the curriculum it is written that pupils should swim on the stomach, on the back and dive. “*Swim on the stomach means nothing to me, is it crawl, breaststroke?*”, says Runnar. It could pertain to many possible strokes. Tor also points out the lack of details in the curriculum. He says that it is not mentioned what to aim for for each activity he teaches his pupils.

If I take the example of sports activities; the first competence is to train and use different skills in selected individual sports, team sports and alternative physical activities (KL06, competence aims after year level 10). Different skills? Who decides which skills should be focused on, how many of these skills? So it is then the teachers who have to sit down and reflect on this. They must start by analyzing the skills to be taught. This is what Runnar tried to explain when he said “*breaking down*” the main goals to more concrete goals. He then makes a list of what he thinks to be relevant skills in the practice of football, volleyball, gymnastics, and all the activities which he wants to present to his class. These concrete goals will then become the targets, “*what to look for*”(Tor) for the evaluation later on. In April 2011, The Norwegian Directorate for Education and Training organized a seminar in Oslo to discuss PE in schools and the curriculum. Groups were debating their points of view about the subject PE and the way PE is taught nowadays. From these discussions, several points were listed to be debated further after the seminar since these points were brought up by the majority of the participants. One of these points was about how detailed the curriculum is and/or should be. The people present at the seminar agreed to say that the curriculum should be formulated more precisely and should be easy to understand. They were thinking that it was an important point if Norway wanted to give the same quality of education in schools (Lyngstad & all.; 2011). After these meetings, more studies was done around this topic. In 2012 the curriculum was reconsider and several changes were made. However, the teachers that I interviewed at the end of the year 2014 agreed with what had been said in 2011, and still share this point of view despite the changes.

Goals are self-referenced as mentioned in the curriculum. But being very wide and not detailed, the orientation of the goals is then dependant on how the teachers “break them down” to adapt them to their practice. Tor says that he wishes that the goals would be more detailed with criteria or “what to look for” for each activity. He admits not having gotten that far with the subject of PE yet, since it is second year as a teacher. He is, however, thinking he will have to sit down sometime soon during his free time and "break down" the goals from the curriculum, as Runnar has done. Sondre, who also has written down more detailed goals to reach, thinks it is easier to be objective and realistic when looking at a pupil’s progression. This aspect will be discussed bellow in the chapter about evaluation (III. 7).

## **6. Authority**

### **1. Decision making**

Holding a PE lesson is very similar to holding any other school subject. One has to plan, finding the best ways to facilitate learning and development. The teacher can also choose to let the pupils come with input about how they would like the lesson to be. The teachers I interviewed say taking into consideration the pupils' suggestions. Nevertheless they admitted doing most of the decision making when it comes to planning the school year. For most of the teachers the plan is already set before the school year starts for the whole year or at least for the first portion. The pupils' input will rather be on the content of each lesson instead of the activities chosen to teach PE through the school year in this case.

The content of lessons is effectively planned later during the year, a week in advance for some, a month for others. This makes it possible for eventual changes and adaptations. The pupils’ suggestions and/or feedback can then influence the way the teacher plans the lesson.

*“I try to get suggestions from the students because at the very end they are the ones that are going to be motivated and are going to be working with that. And as long as I reach my target, I use different means.” -Lars*

Lars considers it important to give the pupils a role in the decision-making process since they are the ones practicing the activities. He thinks that being part of the decision-

making makes them more active when it comes to doing the activities or tasks they decided to practice. The idea that involving pupils in the decision making by requesting input regarding prioritization of tasks and ideas for lessons or practice sessions has positive effect on their motivation toward the activity is supported by Ames. He claims that the authority structure should encourage students to be involved in decision-making and leadership roles in order to build a mastery motivational climate which is defined as the key structure to facilitate and develop pupils' skills (1992).

Other teachers say using the pupils who are training in a sport outside of school, who thus have greater abilities in the sport, even in regards to the teacher can help in the planning and teaching the class. Runnar affirms that it can only make the PE better :

*“Because many sports I have never been into as an athlete, I just learned about it in my education, but I don't have any experience from playing it or doing it, [...] I choose the period and then I let the pupils come with tasks or different problems or different activities we can do that suit the class.” -Runnar*

All of the teachers I interviewed mentioned using the pupils who are involved in organized sports outside of school to help teach others, make decisions and sometimes even lead a part of the lesson in that sport they are involved in. For practical reasons, or pedagogical reasons other times, teachers are involving their pupils in decision-making of their PE lessons. As mentioned involving the pupils is an important aspect of the mastery motivational climate (Ames, 1992). An environment in which the teacher controls all decision-making is supportive of performance goals, which will thus create a performance motivational climate. This last named climate is not wished to be present in the classroom since it focuses the attention on the extrinsic value of learning by promoting the salience of performance goals and encourages pupils to focus on out performing others to succeed. The mastery motivational climate, on the other hand, orients individuals toward developing new skills, improving their competence, or achieving mastery based on self-referenced standards. The focus of attention is on the intrinsic value of learning and maximizing effort (Nicholls, 1989).

## 2. Leading the class

The spontaneous answer I got from all the teachers I interviewed was “I do”. Digging deeper into this topic, they then came to the fact that the pupils are sometimes given the lead.

As I mentioned just in the section above, the teachers sometimes allow the pupils to take the lead under their supervision. Sometimes it can be spontaneous and sometimes it is planned ahead as Sondre said.

Five out of seven teachers I interviewed mentioned the assignment of “pupils in the lead.” They say letting a group of pupils plan a lesson, make all the decisions and lead the class they planned for the rest of their classmates. Some teachers organize this activity for the 8<sup>th</sup>, 9<sup>th</sup> and 10<sup>th</sup> graders, and some others, like Magne, decided to organize it only for the 10<sup>th</sup> graders. He mentioned having tried to have it also in the 8<sup>th</sup> and 9<sup>th</sup> grades, but the lessons they planned were too simple for the class and that the pupils in the class did not put much effort in the lesson when pupils were leading. He added that it takes between 10 and 12 weeks in a year for every pupil in groups to lead a class. He considers it to be time consuming and not adapted enough to the goals for PE. Therefore, he stopped planning this activity for the 8<sup>th</sup> and 9<sup>th</sup> graders.

When I first heard of this assignment some years ago, I thought that the idea behind it was good since the pupils get the chance to show how they think PE should be, or how they wish it would be. Moreover, it develops the pupils’ skills as a leader, which I think is important when you realize that they will be the only leader of their own training in the future. Nevertheless, this is not how the government looked at it. It was considered as time consuming, as Magne pointed out, and it was not seen as a competence that everyone needed to develop. “To conduct an activity once gives no competence,” Idar Lyngstad, Lene Flagestad, Petter Erik Leirhaug, Ingrid Nelvik claimed in 2011. It was considered a challenge that benefited only a few students. It was therefore removed from the curriculum in 2012. Only two of the teachers I interviewed knew about this change. The five others were continuing to have this activity as a part of their lesson plans. Is it because they consider it has importance or because they did not get the updated information that it had been removed? That I do not know. What I can say from hearing about the two teachers who did stop using this activity as part of the PE subject, is that only pupils already good in sports, involved in organized sports outside of the school, get the chance to lead the class. The others are not put in the position of leadership. This could show differences between pupils, putting light on the ones that are “good,” forgetting the other ones, the “less good” ones.

## 7. Recognition

In this chapter I wanted to look closer at how outcomes and striving behaviors are recognized in PE. As Tresure claimed in 2001 rewards and incentives can often lead to social comparison and become more important than the activity itself. In PE, the satisfaction of being active is sought and seen as central if one wants to learn and progress. According the Ames, recognition from the teacher should be given privately and be individually based on effort and progress (1992b). The ideal environment for learning in PE would then be where the teacher recognizes the accomplishment and progress and mistakes are seen as a part of the learning process.

According to the interviewees, recognition is given mostly to the pupils mostly through oral feedback, both during the lessons and outside of the classroom. During the lesson there are two types of feedback depending on the activity. There is feedback which is personal and should be given privately, and there is the kind that benefits all the pupils in the class. In the first case, the teacher will then come closer to the pupils and give him/her feedback on a more individual basis. When they are having individual activities like gymnastics, for example, it is easy for the teacher to go around and talk to the pupils about what is hard, what is easy, what to do to improve. But when playing team sports, for example *“everything happens so fast! Then I just shout small comments,”* said Tor. In the second case, it can happen that the teacher stops the game to discuss common mistakes using specific examples from the game situation. *“We discuss, I explain and we go further,”* said Tor. Tor's experience in recognition reveals the two types of feedback typically given in PE: descriptive (general) and prescriptive (specific) feedback. General feedback is feedback given in vague, general terms like the teacher's reaction to a skill attempt. Examples of such statements are: "Good job," "Way to go," or "You can do it," and "That's great." These types of statements do not tell the students exactly what is good, nor does it give him/her information to be used in the next skill attempt. On the other hand, prescriptive, or specific feedback is statements that are specifically skill-related. This is the type of feedback pupil's need as they learn motor skills. Examples of such statements are: "Turn sideways," "Follow through," or "Use the instep, not the toe to kick." This type of feedback is qualitative, as they describe the processes of the movement as it is being performed. Sondre also said something also about giving details in his feedback in the interview. He stated that it is important to not only say "good" (general feedback), but to be more specific about what the pupils are doing properly. By

saying "good defense" (specific feedback) for example, the pupils then know exactly what he is commenting on and that the "*comment is about things they do and not who they are.*" (-Sondre)

My interviewees found important to mention too that recognition can also be given outside of the PE lesson. Whether a teacher is meeting the pupils in the corridor, or having the pupils coming up to the teacher to ask how he/she is doing in PE, or through a parent-teachers meeting, the teacher gives then more reflected, specific comments about the different aspects of PE.

When it comes to the content of the feedback, and what this feedback is about, I got a standard answer here too. Teachers give feedback in order to "*encourage, get improvement,*"(Geir, Lars). To do so, teachers give feedback about techniques so that the pupils can improve their skills, the effort made so that they understand what the expectations of the teacher are about working hard, the way the pupils interact with each other and finally about the rules. The majority of teachers pay more attention to the two first mentioned (improvement and effort). As Ames insisted on, effort and progress should be in the center for recognition (1992b). Here by commenting on the pupils' technique, the teachers are seeking progress. By improving their technique, the pupils will improve their skills in the activity which is one of the main goals for the PE teacher. Along with this, hard work is also well supported by teaching who consider that improvement cannot happen without effort.

When it comes to what to say and what not to say, the teachers I interviewed don't always use the same strategy:

*"I try to give only positive feedbacks, because the more positive feedback I give, the more happy will the pupils be and the more they want to try of the activity."* -Magne.

*"I try to be positive all the time"* -Runnar.

*" Negative things should be said in private but positive things are good for them to hear."* -Petter.

*“I try to give bad and good comments all the time so they need to know when they have done something good and they know what they can do to get better” -Tor.*

Magne and Runnar try to give only positive feedback thinking that it affects the students positively. On the other hand Petter and Tor use both negative and positive feedback to encourage and motivate their pupils. Prescriptive feedback guides the student in fixing the problem or improving the skill performance. The teacher has to point out what is executed poorly to explain how it could be executed better. There are complex skills, or skills in which the learner cannot see their own body parts and how they are performing (depending on the task). In this case the pupils are in need of feedback from the teacher. By giving only positive feedback the pupils will not be able to see the difference between what he/she executes greatly and what he/she executes poorly. Giving constructive criticism can on the other hand make them realize where they are in the activity and where they are heading for.

When it comes to who the teachers should give feedback to, all of the teachers I interviewed said that they are trying to see all of the pupils in the class and give feedback to each and all of them. But it is not always easy as some teachers mentioned.

Tor admits that this is something he has to work on. He says it is difficult *“to see everybody, to acknowledge everybody.”* He acknowledged giving more to the ones who are working hard and always trying. He admits that *“it is easy to forget about those who want help but don’t have the courage to reach out or ask for help”*. Sondre also mentioned that it is hard to see all the *“20-something”* pupils. This leaves me with a question. How does Magne (and his colleagues) see all the pupils with they are practicing PE with 120 pupils? This is a matter I will discuss further in the chapter about grouping.

The time pressure in PE lesson is also something Sondre mentioned. He cited not being able to give feedback to all of them during each lesson. Thusly, when he does give feedback, it is then usually about what they are doing then and there, but it is not very detailed. He is showing to all that he sees them but he does not want to take time from them being active to give feedback.

The last question I discussed with my interviewees about this matter was about pupils who need more feedback than others. All the teachers agreed that there are always pupils who need more contact with the teacher, need more attention, need to feel like they have been seen more than others. Magne says, *“it will never be equal time because some of*

*them [the pupils] take more time.*” But according to Lars it should not be exaggerated because too much feedback “*would not help. It would just discourage them.*” He also means that the teachers should see who needs more feedback and help and work with them, giving them less and less through the year. Effectively giving too much information, too much feedback to the same pupil could discourage him/her. Giving more feedbacks to the same pupil deals also with the interaction between the teacher and his/her pupils and the interaction between the pupils. A pupil receiving excessive feedback, and consequently attention, from the teacher could be socially affected. The one who would receive none or very little is also likely to be negatively affected. They will start questioning themselves and this could have an impact on their self-esteem. All the pupils should be treated equally, and therefore all of them should get as much as attention from the teacher. The teacher is the one in charge of his own attention, trying to see and give feedback to each of his/her pupils equally.

## **8. Grouping**

Students should be grouped into small mixed ability and cooperative groups. Thusly being given the opportunity to change groups both within and between sessions (Ames, 1992b).

From what I gathered from the teachers I interviewed, I can say that all of them use groups to teach PE. However, the way they make groups can vary from one school to another. There are several ways to make groups; both randomly and planned. The majority of the teachers I interviewed use both methods depending on the activity and tasks presented to their pupils. When the groups are made randomly, the teacher usually counts the pupils of like “1,2,3,4” and every one becomes group one, every two becomes group two and so on. It happens that the teacher “cheats” and suddenly changes direction while counting because he/she wants groups that are neutral and homogenous. I remember myself as a pupil hearing the teacher saying that he/she was going to divide the class in groups, I then counted and moved away from my friend so that we would be in the same group. This is exactly what the teachers are trying to avoid but changing direction. All seven teachers also mentioned dividing sometime girls and boys depending on the activity and on the amount of girls and boys in the class. Sondre has six boys in his class this year and sometimes, allows them to be all in one group. Magne effectively brought up the fact that pupils in lower secondary school

are entering puberty and *“they don’t want to be like stupid in front of the other gender because they have some interest in them so then they do less than if they were with the same gender [in a group].”* This reflects one of the many challenges PE teachers have to face in their daily practice pushing the teachers to adapt the way they teach.

Lars also mentioned conflicts as a factor for decision-making when it comes to making groups. He says having to separate pupils, putting them in different groups because he sees that there is a conflict going on between them socially. It is then best to separate them and take up the problem somewhere else than in the middle of his PE class. A teacher has to continuously observe his pupils and the ways they interact with each other to make groups.

Only one teacher said letting the pupils make groups because the majority of the teachers I interviewed wants the groups to be neutral and homogenous and do not want anyone to be left out, therefore they chose to make the groups.

Ames points out the importance of giving the opportunity to the pupils to change groups both within and between sessions (1992b). The answer to my question about this topic was unanimous: No the pupils cannot change groups. The reasons were also very similar: *“It [groups] is not a set thing and it is just for a short period of time,”* says Sondre. The longest time pupils stay in the same groups in Lars’ class is one whole lesson, depending again on the activity. In Tor’s class the pupils are in the same group in three lessons when they have gymnastics. He says using the same groups not for more than one lesson on a regular basis.

Groups in PE are usually made for a short period of time. It can happen that groups are made for one task and change for the next task, and so on, during the lesson. Therefore, pupils have to stay in the group they are in for the short period of time the group is needed. Lars mentions, “I would lose control.” Making groups should be done fast, as to go on to the activity. If pupils would want to change, and then others had to be sent in the other groups instead, I could see how this would be time consuming and not easy for the teacher to legitimate why one pupil could change and the other one could not. So the theoretical idea of being free to change groups is not realistic since it is not (cannot be) used in practice.

To summarize this topic, it is clear here that the teacher is the one choosing the groups and also the duration of time the pupils have to spend in these groups.

## 9. Evaluation

### 1. Pupils' assessment in PE

As recognition, evaluation from the teacher should be given privately and be individually based on effort and progress; further, students should be involved in self-evaluation against personal goals (Ames, 1992b).

The evaluation in PE is given through grades and comments.

*“The targets [competence aims from the curriculum] don’t tell us how fast a student should run, but it says that the students should run [...]. So what is important is not to evaluate, assess how fast they run, how high they jump. What is going to be assessed is the improvement.” -Lars.*

What is said here is that Lars and his school do not use normative measurement to evaluate the pupils. The evaluation he is describing is more of a continuous evaluation which looks back to where the student started (“the departure point” as he call it), how he/she improved during the lessons to come to the point he/she is now (at the end of the period). All of the teachers I interviewed share Lars’s point of view. But at the same time, evaluation needs structure.

Sondre and Runnar have “broken down” the competence aims listed in the curriculum to more concrete and specific goals as mentioned before, which helps to write down concrete measurements. Through their experiences as teachers, and together with their schools they sat with other PE teachers and came up with a list of detailed tasks that pupils should be able to demonstrate to get the best grade.

*“When it is done you can evaluate on a much better level I think.”* Tor agrees with this method even if he has not made that list yet having just been a teacher for two years. But he thinks he will do it in the near future in order to know exactly what to look for when he evaluates his pupils. Until he sits down and writes the list, he now uses notes under the names of each pupils about *“how they participate, how good are their techniques and how good they play together,”* for each and all the activities.

On the other hand, Geir assess his pupils a little bit differently. He does not use specific criteria or lists. He takes notes, not giving a grade for each activity like the other teachers I interviewed do. Rather he gives the grade based on the whole impression pupils

make on him. Geir finds it very difficult to give a grade for every activity; therefore he decided to focus on longer period, several activities to give his grades.

It does not say any places that teachers should or should not use criteria that they wrote down to help them assess their pupils. Effectively, the instructions from the government are once more not very detailed on this topic. Assessment is regulated by the regulation of the education act for all subjects at all level of education (Chapter 3: Individual assessment in primary and secondary education). It is said in § 3-3 that the basis for assessment is the competence aims listed in the curriculum for each level of education. This sends us back to the curriculum which is described as "very wide," "not detailed," by the majority of the teachers I interviewed. It is then at the local level that decisions are made about the way to assess the pupils in PE.

Criticism can be made about the criteria. The criteria can be seen as normative based and linked with ability assessment, which should be avoided in PE. Therefore, the list of criteria made by the schools and teachers should be self referenced and should focus on one's improvement. Moreover, they should be open so that everyone, including pupils with disabilities can be assessed according to these criteria.

Lars found it important to mention the daily challenges he faces during the interview. When it comes to evaluation, he sometimes struggles. He pointed out one clear example; having disable pupils in his classes. Disable pupils are today integrated in public schools and this affects how pupils are being taught and evaluated because we (the school community) want them to get as good education as the other pupils. *"When they [pupils with disabilities] are in a classroom they are not integrated yet, we have to include them,"* says Lars. He mentioned a girl that he had in one of his class. She was in a wheelchair and took the cooper test together with the other students. The criteria for assessment have to be open so that this girl could also be assessed for her performance, effort and improvement in the activity. The goals and criteria should be achievable by all the pupils.

## **2. Self evaluation in PE**

Concerning self-evaluation, only a few teachers use, or have used it, in their PE classes. All the teachers had heard of it and mentioned that they all thought about using it with

their pupils at least once in their career, but only one of them uses it currently or has planned to use it for the 2014/2015 school year.

Some had used it when the students had the assignment to lead a lesson. After they had led the lesson they were asked how they thought it went and what could have been done differently. That was the only form of self-evaluation in their class and now that this assignment has been taken away from the curriculum, they then stopped using self evaluation for good.

Sondre remembered having used it when he was studying PE many years ago when he had practice in a school. He stated that it takes quite a lot of time and this is why he is not using it currently. His goal is instead to focus more on being active. On the other hand, Magne and Runnar find it useful and meaningful. Runnar used a questionnaire with open questions once or twice some years ago. Magne is still using it currently and he is using a questionnaire called "I am..." and a list of sentences which the pupils have to grade on a scale from one to six (six being the highest score and one the lowest) according to what they think about themselves in the activity.

I don't see how pupils can see their progress if they are evaluating themselves only once in an activity. The ideal form would be to use self evaluation at the start of the activity, and once more at the end so that pupils could see their improvement. For example, when practicing a skill, students would be asked how many times they could perform the required skill in a set time and would record the number in a log. Students would then be afforded the opportunity to attempt to improve that number in subsequent attempts. At the end of the session, students would hand in their logs to the teacher. What Runnar and Magne do is a start, but I feel that it helps them as teacher more to see where the pupils see him/herself compared to where they (the teachers) see them. Magne mentioned that if he sees that there is a big difference between what he (Magne) thinks and what a pupil rates themselves during the self-evaluation, he then has to have a talk with this pupil. It is positive that teachers care about the perception of their pupil's practice. Nevertheless, self-evaluation according to how Magne he uses the method, is, in my point of view, not used as a part of the learning process for the pupils, but rather as a help to the teacher to grade and argue his/her decision when it comes to assessing his/her pupils.

## **10. Time**

The time structure should allow flexible time for improvement and maximize time to practice and learn (Ames, 1992b).

### **1. Flexibility**

When it comes to adapting the content of the lessons, or how the year is built, all teachers mentioned that they have to adapt their initial plan here and there due to material reasons or to fit pupils' needs. Sometimes it can happen that the gym is busy at the time of the lesson, which affects the teaching of PE in the way that the teacher has to come up with another activity for that particular lesson or period as Tor and Geir mentioned. Other teachers, such as Petter, Sondre, Magne and Lars, mentioned that it happens that they decide to have one or two more lessons with the same activity according to the pupils' improvement in that activity. *"If we see that we can bring them up to another level by doing this [activity] once or two more time, then we continue so they can feel that they are lifted in quality for themselves,"* said Petter. Magne mentioned the mood of the pupils being a factor for the adaptation of groups, tasks and activities. Lars looks also at their attitude toward the activity as a factor to decide whether or not to extend a period for a particular activity. The teachers observe their pupils at each lesson; analyzing what would make them improve even more, adapting their initial plan so that each and all of the pupils could see progress.

### **2. Time used for PE in schools**

When it comes to discussing the time which is allowed to PE in each school, opinions are very different. Only Magne shows satisfaction with the time allowed for PE today. He has four 60 minute classes PE each week. He says that his schools tried different ways to have PE and it was discovered that the way they are having it now is the best for the progression of the pupils. On the other hand, Runnar and Geir are unsatisfied with the time allowed for PE in their schools. Geir stated wanting more time even if most of the pupils show improvement. Nevertheless, "most of" does not mean all of the pupils. Therefore, Geir wishes to have more time than two 60 minute classes a week. In Runnar's school, pupils have PE three 45 minute classes a week. Nevertheless Runnar says that they are not active in these 135 minutes. Factoring in time for changing and showering, a class of 45 minutes of PE becomes 30 minutes. And three 30 minute classes a week is considered to be not enough for

Runnar. He argued by saying that *“one needs time and practice to improve.”* He also adds that more PE in schools would affect each pupil by being in better condition, learning more about PE and health and creating long-lasting habits. Moreover, he is convinced that having more PE will also affect the pupils learning in the other subjects. Relatively few studies have explored the relationship between physical activity and academic outcome, and more investigation is warranted before researchers can better understand the effect of physical activity on pupils' school performance. A healthy mind in a healthy body is something we as humans aim for. The link between a physically active body and an intellectual mind was a well-known fact to the Ancient Greeks. Today we know that physical activity is essential for the physical, psychological and social development for children and youth. Regular physical activity improves, among others, general circulation, decreases the risk for some types of cancers, heart disease, blood pressure and increases blood flow to the brain, and raises levels of nor epinephrine and endorphins (Handlingsplan for fysisk aktivitet 2005-2009). The effects of this might reduce stress, improve mood, induce a calming effect after exercise, increase work capacity and possibly contributing to improve academic performance in children by providing a better learning environment (Taras, 2005).

Physical activity as we meet it in schools also provides social benefits. This could also result in improved academic outcomes. Children learn to cooperate, share with others, and abide by rules of group physical activities which make them feel more connected to their school and community. Perhaps as a result it improves achievement. Clearly, more investigation into the benefits of physical activity on school performance is warranted before drawing conclusions.

Petter, Tor, Lars and Sondre have mixed opinions on this topic as they all answer “yes and no” to the question about the time allowed to PE being enough or not. Their explanations of why “yes and no” however vary. Sondre to start with, is generally satisfied having the pupils “moving around” three times a week. Having PE three times a week ensures that the pupils are active at least three times a week. Nevertheless, the lessons are only 30 minutes long due to changing and showering in the allotted time. Therefore, he thinks that more time would result in more improvement. Lars also thinks that the time allowed for PE is very limited, not giving the opportunity for all of the pupils to progress. Petter agrees with Lars, explaining that he thinks that it is too little time for all the pupils to show progress in an activity. Tor, on the other hand, is convinced that the time allows every pupil to progress in each activity.

Nevertheless Tor brings up another issue; the health issue of PE, to stay in shape. He believes that for those who are not active outside of the school, the time spent in PE is not enough. Petter, Runnar and Tor are the three teachers that brought up this issue during their interviews. PE has started to be seen as a tool to improve health and human development since the curriculum "Forsøksplanen" of 1959 (chapter 1.1.1). Ever since, using PE to enhance good health among children and youth has been at the central of the discussions about PE. In the actual curriculum for PE, the first paragraph deals with the purpose of PE is being dedicated to health issues. "PE shall inspire physical activity in all aspects of life and inspire lifelong enjoyment of being physical active," (Curriculum for PE) is what Tor is concerned about when he says that the time for PE is not enough. He thinks that inspiring the inactive pupils with only two hours a week of PE is not achievable.

I finally ask Petter and Runnar since they had the most negative answer regarding this topic, if they had tried other ways to have PE instead of three times 45 (30) minutes for Runnar and a double lesson once a week for Petter. Their answer was no. Could they find a better way to use the time for PE? According to Magne who did try several timetables to end up with the one he thinks works best, it is possible to improve the quality of PE by finding the right timing.

Since 2006, the first time the curriculum LK06 came out, time allowed for PE almost did not change. In 2006, the amount of hours for PE from the 8th to the 10th grade was 223. In 2009, when the curriculum was revised, the hours went up to 228 hours. We could have thought this was a little victory that would open for more later on, but in 2012 it went down to 223 again. The working group put together by the Directorate of Education to investigate PE in schools said in 2011 that the time in PE should be discussed and adapted. The working group believes that the amount of time should increase considerably for the subject's intentions to be achievable. Unfortunately, this topic was also specified as not to be subject to evaluation by the working group by the Directorate of Education(Lyngstad & all., 2011).

*"We have the time we have and we have to use it as best as we can."* -Geir.

Adaptation of the initial plan are possible as long as the number of hours initially planned are used. Reasons for changes can be material, but also due to pupil's needs. All of the teachers explained that they had changed their initial plan and were willing to do it again

for the benefits of the pupils. Teachers can chose to have an activity once or twice more before they decide to go on to the next one if they feel like it will benefit the whole class.

Can I conclude that the time structure allows flexible time for improvement and maximize time to practice and learn? Yes and No as the majority of my teachers answer depending on what issue we are looking at as Tor pointed out.

## Conclusion

The topics for this investigation have been motivation and motivational climate in PE. The investigation tried to identify the strategies used by the teachers to motivate their pupils. I used the TARGET model to build my interview guide which helped me to structure the interview and get the answer I was reaching for. My goal for this research was to answer my main question:

*How teachers strategically make choices in the way they teach PE? How can these strategic choices be related to the assumptions about the performance and mastery motivational climate?*

To answer these questions I focused on the different principles of TARGET model and emitted three hypotheses which I was going to test :

- Teachers are generally task oriented.
- Teachers prioritize strategies promoting mastery climate in their classroom.
- Teachers use theories, earlier researches and TARGET-model as guidelines to help them plan and teach their lessons.

The teachers I interviewed associate ability with learning and personal improvement through effort, which tells me that their conception of ability is undifferentiated according to Nicholls (1984;1989). Moreover, they think that hard work and effort leads to learning and improvement, which tells me that they are task oriented in their teaching and not ego oriented, thinking that beating others and showing others that one is better than others is the way leading to success in PE (Roberts 2012).

Even if the teachers are not well known with TARGET model, their practice respect the model by creating a motivational climate and ultimately promoting mastery. Improvement is at the center of the learning process, and seen as success for the teachers.

Effort has a key role in progressing in PE, according to teachers. Every teacher is going through a wide variety of activities with their pupils using the local facilities. These facilities can sometimes be the reasons for not having certain activities.

Pupils can come with suggestions when it comes to activities or tasks, but usually the year is planned ahead of time, even before the school year starts. Teachers are using pupils in the lesson to help them show or teach certain activities (like if some pupils are practicing this activity outside of the school).

Recognition is given only through oral feedback. This feedback can be given publicly if the teachers considers that it could help others or privately when it concerns only a particular pupil.

Groups are often used in PE classes but the groups are not continuous. They can be the time of the lesson or just the time of a task. Teachers used different strategies to make groups. They plan groups while planning the lessons or choose them at random during the lessons. The teachers that I interviewed were concerned about not letting the pupils choose so that nobody would feel left out.

Evaluation varies from one school to the other. The could mean it being more structured with identified criteria in some schools and/or being more open in other schools.

Time used for PE is a topic that brings various opinions forth. Teachers are adapting the activities to the time they have for PE and are flexible and willing to change their initial plans if necessary; this according to the pupils needs or for material reasons.

I cannot say that teachers use the TARGET model and other theories as guidelines to help them plan and teach their lessons since they are not reading regularly, and keeping updated about what happens in the world of publications in their field. Teachers use the strategies they learned during their education. If, and only if, they meet challenges that they struggle within their classes, can it happen that they search for help in books, on the internet or from their peers.

This investigation brings up more questions about how studies are used in practice and how PE lessons are planned and taught in schools nowadays. Clearly, more investigation about the way PE is taught in lower secondary school and the connection between studies and teaching is warranted.

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## **Appendices**

Appendix 1: Letter to the teachers

Appendix 2: Interview guide

Appendix 3: Approval from NSD

## **Informative letter to PE teachers:**

Claire-lyse Truffert

epost@gmail.com

tlf

10.09.2014

**Hei,**

Jeg er for øyeblikket mastersstudent ved Høgskolen i Telemark i Bø og jeg skriver dette skoleåret en masteroppgave i kroppsøving.

Min forskning omhandler lærernes måte å undervise kroppsøving i ungdomsskole. Jeg vil gjerne forstå hvilke strategier er mest brukt og hvorfor det er slik. Målet mitt er å sammeligne teori og det som skjer i praksis, fordi alle som har erfaring med barn og undervisning vet at teori ikke kan alt og er ikke nok for å forstå og reagere til alle situasjonene som finnes. Jeg vil gjerne bli lærer når jeg er ferdig med utdanningen min, derfor vil jeg tilegne meg gode kunnskaper innenfor pedagogikk og didaktikk gjennom hele prosessen. Til å gjøre det vil jeg gjerne intervju deg. Intervjuet vil bli ca. 1 time og resultater og opplysninger blir behandlet anonymt og man kan trekke seg så lenge studien pågår uten at man må oppgi grunn. Tid og sted avtales nærmere ut i fra når det passer for deg.

Jeg skriver masteroppgaven i engelsk, derfor blir interjuet på englesk for å unngå å miste menningen når man oversetter fra et språk til et annet. Dessuten vil jeg ta opp interjuet på lydbånd, slik at jeg i senere tid kan gå igjennom dem for å få med meg alt.

Hvis dette høres interessant ut, og du kan tenke deg å være med, kontakt meg på telefon eller e-post. Jeg jobber 100% ved siden av studiet så jeg får svare så fort jeg kan når jeg kommer hjem.

Håper du stiller deg positivt til dette prosjektet. Jeg er tilgjengelig for eventuelle spørsmål.

Med vennlig hilsen

Claire-lyse Truffert

Høgskolen i Telemark, Institutt for idretts- og friluftsfag.

## **Interview guide:**

### *Introduction*

Gender

Age

Level of education

How long have you taught PE? Always at this level

Practice of sport: yes - no which one: how much time a week: ...h/w  
at a competitive level: yes - no

### *Task*

How adapted are the activities used in PE:

How many times do pupils have PE each week? How long each time?

How many are they in average in a class?

Which arena do you usually use to teach PE? (gym, football field, ice ring,...)

Is there much variation in the lessons?

How do you choose the tasks that you present to your pupils? Do you have any specific criteria?

What is the main/common goal for these tasks?

How do you combine tasks to build a lesson of PE?

How would you describe the ultimate task?

### *Authority*

How does the teacher include pupils in decision making?

Who takes the decisions in your PE lessons?

Who leads the class?

If depending on situations.. Please give example of 2 situations.

Are the pupils involved in the planning of the lessons?

How far ahead do you plan your lessons? ( 1 month/1 semester/1 year ahead?)

How do you plan these lessons? (// curriculum, suggestions from pupils)

### *Recognition*

Does the teacher give recognition to pupils?

How do you give recognition to your pupils? (Individually/commonly, private/public, rewards?)

About what?

How are pupils who perform well rewarded?

How and when do you give feedbacks to your pupils?

What are these feedbacks related to?

Mostly positive or mostly negative?

Can you give examples about the kind of feedbacks you give to the whole class and the ones you give individually?

Do you think some pupils need more feedbacks than others?

*Grouping*

How does the teacher use grouping in his class?

Do you divide your class in small groups?                      If no: why

If yes: how often?

How? ( // age, gender, ability,...)

When the groups are made, how long do pupils have to be in this same group?

*Evaluation*

How does the teacher and pupils evaluate success in PE?

What do you evaluate?

How do you evaluate? (grade?, following criteria,..)

How often are pupils evaluated?

Do you sometime compare your pupils?

Do you use self evaluation in your class? do you train/encourage pupils to use self evaluation?

*Time*

How is time used for everyone to get the feeling of personal progress and mastery?

Do you think that the time allowed for PE is enough for most of the pupils?

Do you think that the time allowed for each task/activity is enough for everyone to show progress?

Did you ever have to change/adapt your initial plan? If yes: Why?

Would you do it again?

*Other*

What is the teacher's goal orientation?

It is important for you to be a better teacher than others, to outperform your colleagues?

Do you feel like continuously trying to learn new things to develop your abilities as a teacher?

Does the difficulty of learning new things sometimes stops you?

Do you ever avoid teaching something in which you feel like not having the abilities for? Are you afraid of looking incapable?

As a teacher how would you define success in PE for your pupils?

Has mistake an important role in PE?

How do you define ability? Is it something one has or something that one gets?

How important is effort according to you to succeed in PE/ in a task?

Do teachers keep updated with theories after they are done at teacher's schools?

Have you heard/read on motivation's theory before? Where? Do you read articles and publications about this topic still? When was the last time?

Do you get time on your work time to read new publications?

How many hours do you work/week? How many of these hours do you spend with pupils?

Have you heard of the TARGET-model before? Do you think a lot about this model while planning and teaching your lesson?

# Approval from NSD:

Norsk samfunnsvitenskapelig datatjeneste AS  
NORWEGIAN SOCIAL SCIENCE DATA SERVICES



Michael Sæther Reinboth  
Institutt for idretts- og friluftslivsfag Høgskolen i Telemark  
Hallvard Eikas plass 33  
3800 BØ I TELEMARK

Harald Hårfagres gate 29  
N-5007 Bergen  
Norway  
Tel: +47-55 58 21 17  
Fax: +47-55 58 96 50  
nsd@nsd.uib.no  
www.nsd.uib.no  
Org.nr. 985 321 884

Vår dato: 25.08.2014

Vår ref: 39274 / 3 / KH

Deres dato:

Deres ref:

## TILBAKEMELDING PÅ MELDING OM BEHANDLING AV PERSONOPPLYSNINGER

Vi viser til melding om behandling av personopplysninger, mottatt 09.07.2014. Meldingen gjelder prosjektet:

<i>39274</i>	<i>How is PE taught in Norwegians high schools nowadays? A qualitative study among PE teachers</i>
<i>Behandlingsansvarlig</i>	<i>Høgskolen i Telemark, ved institusjonens øverste leder</i>
<i>Daglig ansvarlig</i>	<i>Michael Sæther Reinboth</i>
<i>Student</i>	<i>Claire-Lyse Truffert</i>

Personvernombudet har vurdert prosjektet og finner at behandlingen av personopplysninger er meldepliktig i henhold til personopplysningsloven § 31. Behandlingen tilfredsstiller kravene i personopplysningsloven.

Personvernombudets vurdering forutsetter at prosjektet gjennomføres i tråd med opplysningene gitt i meldeskjemaet, korrespondanse med ombudet, ombudets kommentarer samt personopplysningsloven og helseregisterloven med forskrifter. Behandlingen av personopplysninger kan settes i gang.

Det gjøres oppmerksom på at det skal gis ny melding dersom behandlingen endres i forhold til de opplysninger som ligger til grunn for personvernombudets vurdering. Endringsmeldinger gis via et eget skjema, <http://www.nsd.uib.no/personvern/meldeplikt/skjema.html>. Det skal også gis melding etter tre år dersom prosjektet fortsatt pågår. Meldinger skal skje skriftlig til ombudet.

Personvernombudet har lagt ut opplysninger om prosjektet i en offentlig database, <http://pvo.nsd.no/prosjekt>.

Personvernombudet vil ved prosjektets avslutning, 01.01.2015, rette en henvendelse angående status for behandlingen av personopplysninger.

Vennlig hilsen

Katrine Utaaker Segadal

Kjersti Haugstvedt

Kontaktperson: Kjersti Haugstvedt tlf: 55 58 29 53

Vedlegg: Prosjektvurdering

*Dokumentet er elektronisk produsert og godkjent ved NSDs rutiner for elektronisk godkjenning.*

*Avdelingskontorer / District Offices*

OSLO: NSD, Universitetet i Oslo, Postboks 1095 Blindern, 0316 Oslo. Tel: +47-22 85 52 11. [nsd@uis.no](mailto:nsd@uis.no)  
TRONDHEIM: NSD, Norges teknisk-naturvitenskapelige universitet, 7491 Trondheim. Tel: +47-73 59 19 02. [kjrrs@svt.ntnu.no](mailto:kjrrs@svt.ntnu.no)  
TROMSØ: NSD, SVE, Universitetet i Tromsø, 9037 Tromsø. Tel: +47-77 64 43 36. [nsdmaa@svt.ntnu.no](mailto:nsdmaa@svt.ntnu.no)