Assessment in physical education

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Summary

The aim with this study
The aim with the presented study was to examine how the relations between the instructions of assessment in KL 06 (approved by the Dept of education) and the assessment practice in physical education (P.E.) in upper secondary schools in Vestfold and Telemark could be described. Further on, the study wanted to look into in what degree the instructions of assessment were well known to the physical education teachers and whether they believed the instructions of assessment gives a good basis for assessment practice in physical education. In addition, the study also had the aim of looking into how many lessons physical education teachers needed to be able to have enough foundation for assessment to give students a grade. The presented study also wanted to look into what kind of criteria physical education teachers used when they gave the grade 1 (failure/stryk). Finally, the study presented aimed at look into possible differences in the P.E. assessment practice between Vestfold and Telemark in physical education.

These results are useful, not only for each County and the P.E.teachers working in those counties, but also for the Dep.of education and everyone who is involved or interested in assessment in physical education in upper secondary schools.

Methodical approach
82 physical education teachers from upper secondary schools in Vestfold and Telemark participated in this quantitative study. The respond rate was 63%. 23 out of 25 schools returned questionnaires within February 2010. The participants responded on questions regarding their assessment practice in physical education and their opinions about the instructions of assessment in KL 06.

Results
This study showed that the relations between the instructions of assessment in KL 06 and the assessment practice among physical education teachers in Vestfold and Telemark can be described as weak. The reasons for this indication were because the teachers assessment practice had a wide range of use. The assessment practice in general indicated to be both split and/or divided. In addition, also considering that KL 06 has now been in practice for five years. There are many factors that may explain the reasons for this weak relation. However,
this study presents results which indicate to have a stronger relation to the instructions of assessment than results of previous research.

The mean of using effort, skill and knowledge in the weighting of criteria were respectively 51%, 25% and 24%. The use of effort as a criteria and the use of taking individual premises into account in the assessment were still common among physical education teachers, despite that the instructions of assessment rejected this practice.

This study shows that the major part of physical education teachers do not manage, according to the instructions, to give students formative assessment.

Physical education teachers in Vestfold and Telemark were known to the instructions of assessment in KL 06, but only one out of four said that they knew them very well. Half of the physical education teachers expressed that they wanted more knowledge of the instructions of assessment in KL 06.

The major part of physical education teachers believed that the instructions of assessment do not give a good basis for assessment practice. With the possibility of local adaptations there was a split decision, but over half of the physical education teachers stated that assessment was easier during the last reform, Reform 94, than today. Only 11% believed that it is easier today than during Reform 94.

This study shows that physical education teachers needs 20.41 lessons in average to have enough assessment foundation to set a grade. 43% of physical education teachers in upper secondary schools in Vestfold and Telemark needed student participation in one out of four lessons, or less, to have a foundation for assessment. 40% could not pinpoint the lessons they needed. In KL 06 there are no participation requirements. It all depends on the individual teacher's needs and requirements.

Finally, this study presents some differences between Vestfold and Telemark as to assessment practice in physical education. The significant (p<.05) differences were the use of the criteria effort and skill, lessons teachers have secondary and/or criteria goals defined, the
use of taking individual premises into account in the assessment, and the need for participation to obtain enough assessment foundation to set the grade 1.

This study indicated that Vestfold had a stronger relation to the instructions of assessment in the assessment practice than Telemark, and that Telemark needs less participation than Vestfold to obtain enough assessment foundation to set the grade 1.

Discussion and conclusion

This study presents the results of a subject which indicates to be in need of a minimum and standardised requirements. Teachers’ freedom and easy assessment instructions seems to be in favour of the students right to an assessment practice that reflects justice and is transparent to other comparable students. This study also presents results which shows that physical education teachers do not manage, according to the instructions, to give the students formative assessment towards the competence goals in the subject. The results in this study also supports previous research. Both Vinje (2008) and Jonskås (2009) showed that teachers were in need of a minimum and standardised requirements, and that the use of effort as a criteria in the assessment was still common among physical education teachers.

Future research

To verify and explore the results of this study there is a need for more research. First of all, in other parts of the country. It could also be very useful to look at self assessment, experienced vs. inexperienced physical education teachers and finally, but not least, qualitative studies which could explore these results in a higher degree.

I believe it also would be very useful to examine whether physical education could become a subject with an practical and oral exam for students in upper secondary schools. When the teacher and students know that there is a possibility for an external examiner visiting at the end of the school year, it could force them to work harder towards the competence goals and according to the instructions of assessment in KL 06.

As to the general need for more research, there is also a need for more research for a longer period over time, longitudinally studies. This could give more explicit information about the relation between the instructions of assessment and the assessment practice in physical education.
Sammendrag

Hensikten med studiet

Hensikten med det presenterte studiet var å se på hvordan relasjonen mellom forskriftene for vurdering i KL06 (godkjent av Utdanningsdirektoratet) og vurderingspraksisen i kroppsøving på videregående skoler i Vestfold og Telemark kunne beskrives. Videre ønsket studiet å se om vurderingsforskriftene var godt kjent blant kroppsøvingslærerne, og om de trodde vurderingsforskriftene gir et godt grunnlag for vurderingspraksis i kroppsøving. I tillegg siktet studiet seg på å undersøke hvor mange timer kroppsøvingslærerne måtte ha for å ha nok grunnlag til vurdering slik at eleven får en karakter. Videre ønsket studiet å presentere hva slags kriterier kroppsøvingslærerne brukte når de ga karakteren 1 (stryk). Til slutt ønsket studiet å presentere eventuelle forskjeller i vurderingspraksisen mellom Vestfold og Telemark i kroppsøving.

Disse resultatene kan være nyttige, ikke bare for hvert enkelt fylke og kroppsøvingslærerne som arbeider der, men også for Utdanningsdirektoratet og alle som er involvert eller interessert i vurdering i kroppsøving på videregående skole.

Metodisk tilnærmning

82 kroppsøvingslærere fra videregående skoler i Vestfold og Telemark deltok i dette kvantitative studiet. Svarprosenten var på 63%. 23 av 25 skoler sendte spørreskjemaer i retur innen utgangen av februar 2010. Respondentene svarte på spørsmål om deres vurderingspraksis i kroppsøving og deres meninger om vurderingsforskriftene i KL06.

Resultater

Det presenterte studiet har vist at relasjonen mellom vurderingsforskriftene i KL06 og vurderingspraksisen blant kroppsøvingslærere på videregående skoler i Vestfold og Telemark kan beskrives å være svak. Den er svak fordi lærernes vurderingspraksis har ett bredt spekter av bruk, er oppsplittet og/eller delt. I tillegg er relasjonen svak med tanke på at KL06 nå har vært i praksis i snart 5 år. Det er mange faktorer som kan forklare årsaken til denne svake relasjonen. Allikevel viser dette studiet resultater som indikerer å ha en sterkere relasjon til vurderingsforskriftene enn resultater fra tidligere forskning.
Gjennomsnittlig bruk av vekting for kriteriene ferdigheter, innsats og kunnskap var henholdsvis 51%, 25% og 24%. Bruk av innsats som kriterie og bruk av individuelle forutsetninger i vurderingen er fortsatt svært vanlig blant kroppsøvingslærere til tross for at vurderingsforskriftene gir instrukser om noe helt annet.

Dette studiet kan også presentere resultater som indikerer at de majoriteten av kroppsøvingslærerne ikke klarer, i henhold til forskriftene, å gi studentene underveisvurdering mot kompetansemålene i faget.

Kroppsøvingslærerne i Vestfold og Telemark kjente til vurderingsforskriftene i KL06, men bare 1 av 4 sa de kjente dem veldig godt. Over halvparten av kroppsøvingslærerne uttrykte ønske om mer kunnskap om vurderingsforskriftene i KL06.

Hoveddelen av kroppsøvingslærerne mente at vurderingsforskriftene i KL06 ikke ga et godt grunnlag for å praktisere vurdering. Med mulighet for lokale tilpasninger var det en delt mening om vurderingsforskriftene da ga et godt grunnlag for vurderingspraksis, men over halvparten av lærerne mente at vurderingen var lettere i den siste reformen, Reform 94, enn i dag.

Dette studiet viser også at de kroppsøvingslærerene som kunne fastslå timene de trengte måtte ha 20,41 undervisningstimer i gjennomsnitt for å ha nok vurderingsgrunnlag til å sette karakter.

Studiet presentert her viste da også at 43 % av kroppsøvingslærerne måtte ha deltagelse fra en elev i en av fire timer eller mindre av deres totale undervisningstimer for å ha et grunnlag for vurdering. 40 % kunne ikke tidfeste timene de trengte. I KL06 er det ingen krav om deltagelse. Alt er avhengig av hva den enkelte lærer mener er tilstrekkelig for å ha vurderingsgrunnlag.

Det presenterte studiet viste til slutt noen forskjeller mellom Vestfold og Telemark i sin vurderingspraksis i kroppsøving. De signifikante (p <,05) forskjellene var bruken av kriteriene innsats og ferdighet, antall undervisningstimer lærere har delmål og/eller kriterier definert, bruken av å ta hensyn til individuelle forutsetninger i vurderingen, og behovet for deltagelse til å ha nok vurderingsgrunnlag for å sette karakteren 1.
Dette studiet indikerte at Vestfold hadde en sterkere tilknytning til vurderingforskriftene i KL06 enn Telemark, og at Telemark trenger mindre elevdeltakelse enn Vestfold for å ha nok vurderingsgrunnlag til å sette karakteren 1.

**Diskusjon og konklusjon**


**Fremtidig forskning**

For å verifisere og utforske resultatene av dette studiet er det behov for mer forskning. For det første, i andre deler av landet, for det andre kan det være svært nyttig å se på elevvurdering, erfarne kroppsøvingslærere i forhold til uerfarne kroppsøvingslærere, og til slutt, men ikke minst kvalitative studier som kan gå dypere i datamaterialet.

Jeg tror det også vil være svært nyttig å forske på om kroppsøving bør bli et fag med en muntlig- og praktisk eksamen for elever i videregående skole. Når læreren og elevene vet at det kan komme en ekstern sensor på besøk på slutten av skoleåret, kan det tvinge dem til å jobbe hardere mot kompetanse målene og i henhold til vurderingsforskriftene i KL 06. Med resultatene av dette studiet ville det vært interessant å undersøke hvilke andre kriterier i tillegg kroppsøvingslærere bruker når de setter karakteren 1 og hvor mange av det totale elevene som får denne karakteren. Jeg tror det er få studenter med karakteren 1 i kroppsøving og mange elever med "ikke vurderingsgrunnlag". Jeg mener dette også må utforskes i fremtiden slik at faget fremstår mest mulig helhetlig.

Det ville også vært svært interessant å utforske elevers meninger om den praktiserende vurderingen i kroppsøving, og spesielt hva gjelder individuelle forutsetninger som lærere i dag ikke kan ta hensyn til når de vurderer.
I tillegg er det også behov for mer forskning over tid, longitudinelle studier. Dette kan gi mer eksplisitt informasjon om koblingen mellom vurderingsforskriftene og vurderingspraksisen i kroppsøving.
Pre-face

I never believed that a master thesis was so much work! There have been times I regreted doing this. Working full-time, studying full-time and supporting a family with three kids has been of tremendous challenge. Being part of a student group to discuss, to give and to receive help, has been something I missed a lot during this project. Writing a master thesis 4 hours by bus away from the University is not recommendable.

I truly hope this study will have influence on the development of assessment instructions and the practice of assessment in the future. If so, it was worth all the pain and work.

This master thesis is written in English and the main reason is that I have used a software which enables me to speak into the computer, not using a traditional keyboard and mouse. This software is not available in the Norwegian language yet. I have a muscle decease which unables me to use traditional keyboard and mouse. The thesis is written as good and truthfully as possible with my command of the English language. All quotations in the thesis, which is originally in the Norwegian language, are translated as best as I could into English. All quotations which are originally in the English language are quoted as stated.

This master thesis would probably not have seen the daylight without the help of:

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1.0 Introduction

Physical education is a mandatory subject in all thirteen school years in Norway. In upper secondary school, 11th-13th grade, each student has 90 minutes, two lessons, of this subject a week, a total of 56 clock hours annually (UFD, 2005).

Earlier, in Reform -94, there was a mandatory three divided model of assessment in physical education stated by The Secretary of Exam. The three assessment criteria were; effort, skills and knowledge, each of them weighting with one third (KUF, 1998).

As to the criteria of skills the teacher had to evaluate motor- and co-ordination abilities. Within the criteria of effort there should be focus on co-operation, attitude to the subject, the teacher and fellow students. The criteria of knowledge should demonstrate the students’ theoretical level in the subject (By, Nygaard og Strømskag 1998). Most of this was removed when KL-06 was sanctioned in 2006 (UFD, 2005).

With a new curriculum, Kunnskapsløftet 2006 (KL06), and new assessment instructions there are probably many teachers who think: Which criteria shall we make use of in physical education when the former three divided model has been withdrawn?

We find the foundation and argument for assessment in the Directions § 3-2 and § 3-3 from the Department of Education.

The objective of assessment in a subject is to encourage learning throughout the school year, and express the competence of the student during and at the end of the school year in the subject. Formative assessment is a tool to use in the learning process as a basis for individual learning (tilpassa opplæring), and contribute to a increase in the students’ competence (UFD, 2009).

The basis of assessment in a subject is the competence goals in the curriculum. Individual premises shall not be considered when assessing in subjects, with the exception of physical activity in lower secondary school (Ungdomsskolen) (UFD, 2009).
Within KL-06 there are completely new settings which radically change the basis of assessment. There are no instructions which differ physical activity in upper secondary school (videregående skole) from other subjects. The former three divided model in Reform-94 is no longer fit for use or legal, according to the Department of Education (UFD, 2009)

The topic “Assessment in physical education” was chosen for several reasons. First of all, I have been working as a teacher at a upper secondary school in Vestfold for seven years. My main-subject is physical education (P.E.). Assessment is continuingly under debate both generally, but also especially in this subject. In the school’s P.E. division there is hardly a meeting without this debate, especially regarding to the discussion of "not able to assess". When a student is absent continuously when the assessment is done, and the teacher does not have enough foundation for assessment to set a grade, the teacher can set "not able to assess" (Ikke vurderingsgrunnlag) (IV) (§3-3, UFD, 2009).

The topic will also be a learning process for myself. I experience that it is often frustrating and difficult to assess students from the guidelines we find in KL-06, The Law of Education (Opplæringsloven), Instructions to The Law of Education (Forskrift til Opplæringslova) and other official documents.

Assessment is mandatory for all teachers working in upper secondary schools. One could argue that it controls much of our daily work. In addition, assessment is a special interest for me and is one of the reasons why I work in upper secondary school and not in primary school.

The Norwegian Students’ organisation has promoted a wish and a suggestion to eliminate the assessment in physical education. (Dagbladet, 25/02-09). They argue that the evaluation was unfair and random. They also believed that the aim of the subject is "lifelong physical activity", not related to certain business or education in general.

Physical education has no final exam, which is an evident argument to have summative assessment (Standpunktkarakter) (UFD, 2005, s. 157).

P. E. is a subject which the students attend all three years at upper secondary school, and it's only the grade for the last year which will be shown in the school testimony. The P.E. grade
weighs equal to the grades in all other subjects when the students apply for higher education. It is therefore important that this grade reflects justice and is transparent to other comparable students.

The scale of grades is as follows: Grade 6 expresses that the student has outstanding competence in the subject and grade 5 expresses that the student has very good competence in the subject. Grade 4 expresses good, grade 3 expresses fairly good and grade 2 expresses low competence in the subject. Grade 1 expresses very low competence and not passed in the subject (§3-4, UFD, 2009). If a student instead of a grade get I.V. (not able to assess/ikke vurderingsgrunnlag) it is because the teacher has not obtained enough foundation for assessment to give a grade (§3-3, UFD, 2009).

Three examples can illustrate some of the frustration of the existing assessment:

Case 1) Trude doesn't want to be a part of the progression in the lecture on diving elements. She wants to be by herself on the other side of the pool. Trude has a lot of absence throughout the school year in the subject. She is often rude towards her fellow students and the teacher. Suddenly Trude makes a perfect dive. Shall this student be rewarded with the grade 5 or 6 in this category?

Some will say: Yes, her skills in diving are high and it is only her skills we shall evaluate. Her rudeness will be marked on her “behavior grade” and her absence will be marked on her “order line grade.”

Others will say: No, attitude, effort, and being present are parts of the skills in the subject and have to be a part of the assessment.

Case 2) Truls has been present in all the lessons in physical education. He is generally very negative to everything including most of the activities. He is afraid of the ball and often gets angry for no particular reason. On several occasions he has been so negative and angry that he has walked out of the gym or sat down just to watch. His skills as to the majority of the curriculum is considered grade 1. Shouldn't he at least get the grade 2 and pass, because he is never absent, compared to most of the other students?

Case 3) Marit has not attended one lesson in the subject throughout the school year. Much of this absence is documented. She has not handed in any compulsory tasks. Marit has from time to time promised that she will attend the lessons and she has also asked by mail and telephone
how she can pass physical education. Her teacher, who has been both censor and examinor earlier, knows how easy it is to get a grade and pass in physical education through a private exam. Should the door be closed for Marit or can two months with participation, tests and compulsory tasks make her pass in the subject?

These three cases can illustrate some of the difficulties and the frustration teachers in physical education experiences regarding assessment in the subject today.

My own work place is an important reason for my master thesis. My employer wants me to look into assessment in physical education. We need a general and mutual understanding of assessment, both in my school and in Vestfold, and not at least nationally.

Assessment has fascinating effects. Assessment shall motivate, develop and not at least be instructive for students. Furthermore, it shall also be a guide and motivation for the teacher in his or her pedagogical work (UFD, 2005).

Physical education is, as mentioned, one of the few subjects where the students don’t have an ordinary exam. They can have an exam as a private student (privatist), but they do not have a practical exam as an ordinary student. This means, naturally, that the teacher does not need to prepare the students for an exam. The teachers’ task is to help the students attain the competence goals as good as possible and then assess how they have succeeded in this project.

The Department of Education states that the basis of assessment in each subject is the competence goals written in the curriculum. This is settled in KL-06. Further on, The Department of Education states that assessment is an instrument to attain the goals in the curriculum (UFD, 2005). What kind of methods each teacher wants to apply to attain the objectives is up to themselves. All the work to fulfil the intentions in the curriculum depends therefore on each teacher. The teachers have the possibility to create methods and secondary goals with local adaptions which fit each schools own environment and premises (By, 2010).

My intention in this thesis is to examine similarities and possibly differences between today's instructions from The Department of Education and the assessment practice of physical education teachers in upper secondary schools in Telemark and Vestfold. Further, it is my
hope that this master thesis will be an important and helpful contribution to my place of work, the very working-day and my own development as a teacher. This project will hopefully also give me a more thorough assessment knowledge. Last, but not least, I hope that my school, the section I work in, Vestfold county municipality and other comparable schools will benefit from these results.

I also have a wish that students grade in physical education reflects justice and is transparent to other comparable students. In other words; if a student gets the grade 4 with me as her physical education teacher she would most probably get the same grade in other upper secondary schools in Norway.

The content of this thesis will further on clarify the approach to the problem, conceptual formulation, theory and previous research, method and presentation of the results. At the end I will discuss the results towards the theories and previous research.
2.0 Approach to the problem

It is the relations between the instructions of assessment and the actual assessment practice of physical education teachers in upper secondary school in Vestfold and Telemark, that I believe has not been examined sufficiently.

My main research question is as follows:

How can the relations between the Instructions of Assessment in KL 06 (approved by the Department of Education) and the assessment practice in physical education in upper secondary schools in Vestfold and Telemark be described?

Moreover, are the instructions of assessment well-known to the physical education teachers? To what degree do the physical education teachers believe that the instructions of assessment give a good basis for assessment practice in physical education in upper secondary school? What kind of criteria do P.E. teachers use when they give the grade 1 (failure/stryk)? How many lessons do physical education teachers need to have enough assessment foundation to be able to give a grade to a student in upper secondary school? Is there a difference in the assessment practice between Vestfold and Telemark in physical education?

I will later in this thesis explain further on these secondary research questions.

According to former research, KL-06, directions from the Department of Education and various debates, are we today experiencing a potential uncertainty regarding assessment practice in physical education? I will in this thesis examine whether this is correct in Vestfold and/or Telemark, and eventually look further into possible causes.
3.0 Conceptual formulation

**Summative assessment** (assessment of learning) (Standpunktkarakter): Assessment of learning is the final grade at the end of the course, exam assessment and assessment in craft certificates. Assessment of learning also includes assessment in competence tests and assessment of practical competence. (§3-11 and §3-18, UFD, 2009)

**Formative assessment** (assessment for learning) (Underveisvurdering): Through assessment for learning both teacher and student get information of the student’s progress in the subject. The objective is to encourage learning and development with or without grades. (UFD, 2009)

**Instructions of assessment**: Approved by the Dept of education in 2005 and is regarding chapter § 3 in the Instructions (Forskriftene) from 1 September 2009.

**Assessment practice**: The teachers practising criteria when assessing the students. This can be different assessment methods as observation, written tests and assignments, running and technique tests, student teaching students and so on.
4.0 Theory

The Directions from the Department of Education are central to enlighten my research question formulation. The instructions say, among other things, that the assessment in orderliness and behaviour shall be kept apart from the students competence in the subject (§3-5 Forskrift til Opplæringslova) (§3-5 Instructions in the law of Education).

It is only the level of degree the student has achieved on each competence goal which shall be assessed in the subject today. In 1998, The Secretary of Exam recommended the use of the three divided model as mentioned earlier. It is no longer allowed to make use of that model.

Further on, the Law of education states that students in public upper secondary school have the right to be assessed. This right includes formative and summative assessment, but also the right to see the documentation of this education. The student has to be aware of the competence goals in the education and what is being used as assessment criteria and the foundation of the assessment (UFD, 2009: §3-1 instruction in the law of education) (§3-1 i forskrift til opplæringslova, UFD, 2009).

The teacher has to make the student aware of the competence goals in the subject, together with the criteria being used to assess the students. The criteria is something the teacher has to develop by herself, or together with the students.

The teacher shall, as far as possible, obtain sufficient foundation for assessment of each student, so the student right can be obtained. The student has to be present and be active in his education, so it is possible for the teacher to have a foundation for assessment. A large absence, insufficient participation in planned assessment situations or other special reasons can contribute to the assessment foundation being too weak to set a term grade and/or a summative grade (§3-3, UFD, 2009).

On one hand the student has to be active and participate in her education, but on the other hand the student also has the right to be assessed, both formative and summative.

Assessment has different objectives: 1. Information to the student, information to parents, teacher and the school, towards approaching the competence goals and how far the student has achieved according to this. 2. To guide, motivate and develop the student. 3. To motivate the teacher to continuously reflect on her assessment practice. 4. To inform the society,
working life and higher institutions of education about what level of competence the student has achieved (UFD, 2005).

The directions of assessment in KL-06 were made and based on previous research and science (UFD, 2005). I will later on in this chapter look at possible foundations of theories which KL 06 were based upon. KL 06 emphasizes the outcome of learning instead of the methods of work and content, which was the substance in the last reform, Reform-94 (Imsen, 2006).

4.1 Reform 94
To fully understand why there might be a weak relation between the instructions of assessment and the assessment practice in physical education it is important to give a brief information about Reform 94. This reform gave all adolescence in Norway between the age of sixteen and nineteen the right to three years of upper secondary education. Before this, the right to school attendance was limited to lower secondary school. With Reform 94 they could now choose one out of 13 line studies. There was a general part (L-97) which should be integrated in the education, and also curriculas specific for each subject. In this reform there were also defined the content and the way of work that teachers should emphasis in their work, to a more extensive degree than earlier reforms (Imsen, 2006). These changes resulted in a focus of more students participation and more adaptive education (Tveit, 2006). This gave the teachers less choice in their way of work. It became a more controlled based education, where the government had the possibility to see, to a larger extent than earlier, the results of what the teachers did. Documentation became a keyword in all part of the teachers daily work. Together with the new reform the Dept of education edited new instructions regarding exam, control and the students rights to complain on the assessment (Imsen, 2006).

Reform 94 also contained a chapter regarding assessment. The main aim was to ensure a national standard in the education, so that every student could obtain equal education. Just like KL-06, it was the students’ total competence in each subject which should be assessed. The assessment should show to what degree the student had obtained the goals in the curriculum. The assessment had to distinguish between formative assessment and summative assessment (KUF, 1994). This was probably a bit clarifying for many teachers. There had not been any assessment criteria in earlier reforms (rammeplaner). These new criteria were;
effort, skill and knowledge. The criteria was weighed equally in upper secondary school (KUF, 1994). In practice, this meant for example that students who were showing good skills, but lack of the other criteria should then be given the same grade as students showing high effort/cooperaton, but had a lack of skills.

Reform 94 opened up the possibility to both individual related and goal oriented assessment. Teachers tried to combine these assessments, but there were disagreements on how it should be practiced. It was, in a way, solved by using the individual related assessment as formative assessment and the goal oriented assessment as summative assessment (Peev, 2001).

Individual related assessment take into account the students’ own premises when the teacher set a grade (Helle, 2007). This means that the teacher shall expect less from one student with asthma than one without when running for example the Beep-test or the cooper-test. A student can therefore get the same grade, or better, than another who has better skills because of the students own premises. Many teachers wish to reward students who put in an extra effort with a better grade than the competence goal demands (Imsen, 2006). This can no longer be done when setting the grade, but can be used in formative assessment without a grade. This formative assessment is a tool with a focus on learning and development (Imsen, 2006).

Goal oriented assessment is when the student is compared to the competence goal in the curricula. This is the existing assessment system in the Norwegian school today (Imsen, 2006). This system requires concrete competence goals, so the teacher easily can explain the student to what degree she has reached the competence goal (Imsen, 2006). As mentioned earlier, there are no written instructions from the Dept of Education regarding required skill levels on each competence goal. The teachers must make these themselves (Engh m.fl, 2007; By, 2010). The intention behind a goal oriented assessment is to be fairer among students (Engh m.fl, 2007). The grade 4 shall be given to the same student whether she attains at a upper secondary school in Tønsberg or in Bø. One disadvantage as to goal oriented assessment is its focus on the end results, and not the learning each student attain on their way towards reaching the competence goals (Imsen, 2006).
4.2 Kunnskapsløftet-2006 (KL 06)

A new reform was launched in the spring 2004, and this reform, Kunnskapsløftet 2006 (KL-06), was carried throughout the whole Norwegian education system from autumn 2006. This reform was based on, and a result of, international and national research on the Norwegian education system (UFD, 2005).

KL-06 was divided into three main parts: the general (L-97), the teaching poster (Læringsplakaten) and the curriculum of each subject. The general part, from 1993, was kept and continued in KL-06. The teaching poster were guidelines for education in schools and told what each school was obligated to do. These obligations could also be found in the instructions, in the general part and in the law of education. The intention was to show that it was a connection throughout the whole curriculum of KL 06 (UFD, 2005).

The curricula for physical education maintained the purpose of the subject (formålet med faget), main areas (hovedområder) and the competence goals. The aim of the subject was to encourage good health, contribute to students motivation of doing sports, give knowledge to students on how the body functions and finally inspire creativity and independency. The students experiences in physical activity shall motivate youngsters to physical activities after they are finished with school (UFD, 2005).

The curriculum in physical education at upper secondary school was divided into three main areas in each of the three years: sports and dance, outdoor life, training and lifestyle (see appendix 5).

KL 06 differed from earlier reforms. This time the reform covered primary school to upper secondary school, while Reform 94 only covered upper secondary school. KL 06 was shorter compared to Reform 94, and there were competence goals after each of the three years at upper secondary school. KL 06 emphasised the five basic skills in all curriculums. These skills were; the ability to communicate orally, the ability to read, the ability to express yourself in written form, the ability to count and the ability of using digital tools (Imsen, 2006).
Maybe the main difference between KL 06 and earlier reforms was the focus on the ending teaching results of the competence goals. The focus earlier was much more on the process towards the competence goals. With KL 06 it looks like teachers must be more achievements- and result oriented than earlier (Imsen, 2006).

Further on I will present the changes from Reform 94 to KL 06 regarding assessment.

**4.2.1 Assessment in KL 06**

Together with KL 06 new instructions of assessments came along. These instructions stated that it was only the competence goals which should be assessed, and it was the students’ total competence at the end of the school year which should be summative assessed (UFD, 2009).

In addition to this, new instructions stated that every student should be given at least one formative assessment each term. The intention by this was to give feedback to the students to what degree he or she had reached the competence goals, with the aim of reaching a higher competence in the subject (§ 3-11 and §3-13, UFD, 2009).

“Formative assessment is a tool in the process of learning, as a foundation for the individual adaptive education and shall contribute to develop the students’ competence in the subject. The summative assessment shall give information of the students competence by the end of the education in the subject. Formative assessment and summative assessment shall be executed in coherence to increase the learning” (§ 3-2, UFD, 2009).

The summative assessment should give every student a grade, while formative assessment could be given with or without a grade.

The formative assessment should be given consecutively and systematically, and could be done orally and/or written. The formative assessment should contain reasonable information about the student competence and should be given with the aim of progress in the subject (§ 3-11, UFD, 2009).
The midterm assessment was a part of the formative assessment and it should show the competence of the student according to the competence goals in the curricula. This formative assessment should also give guidance on how the student could increase his competence in the subject (§ 3-13, UFD, 2009). Further on, the instructions told us that from eighth-grade every student should have a midterm assessment in a written form and it had to be documented that formative assessment had been given (§ 3-13, UFD, 2009).

"The teacher is obligated to give formative assessment, state reasons for the assessment to each student and give them individual guidance on how to do better in the subject. In addition to this the teacher is obligated to document that this assessment has been given" (§ 3-13, UFD, 2009).

A physical education teacher holds up to 350 students each year. With eight competence goals in the subject (VG1) there has to be at least 5600 assessments with grade as a minimum when you include midterm and summative assessment. Also the same amount of formative assessments shall be carried out according to the instructions. This can be done with or without a grade, orally and/or written. It has to be documented that the assessment has been given. The aim with all of this is better student performance.

For a full time physical education teacher you have to do at least 11 200 assessments each school year with 350 students. This will give you an average of 295 documented assessments each week as a minimum.

Formative and summative assessments were new concepts to teachers. The formative assessment should include a describing assessment and had to state what competence the student had reached. It did not had to be written. Each school could decide how to give this feedback (UFD, 2009).

This assessment should also give information to the student to what degree they had reached the competence goals in the curriculum. In the end the teacher had to document that there had been given assessment. The teacher decided for herself the extent of the documentation. There has not been given any guidance on this from the Dept of education so far (Engh, 2008).
Formative assessment is mandatory and much more emphasised in KL 06 than Reform 94. Effort as a criteria, taking into account individual premises in the assessment and the weighting of criteria, was history after Reform 94 and no longer void.

4.2.2 The basis of the assessment

With the introduction of KL 06 new assessment instructions gave different basis of the assessment than earlier. These changes are stated in §3-3 and §3-5.

§3-3. The basis of assessment with grades is the objective of competence in the curriculum in KL-06. The grades shall express the ability the student has achieved at the time the evaluation is performed and what is expected from the student at that time. The students social and psychological premises shall not be considered in the assessment. Orderliness and behaviour shall not been drawn into attention when assessing the subjects” (UFD, 2009, §3-3).

§3-5. When setting the grade in orderliness the teacher consider whether the student shows regular good working effort and how the student practices the rules of order which is sat at each school. The assessment in orderliness and behaviour shall be kept apart from the assessment of the students competence in each subject. (...) In the assessment of orderliness and behaviour the teacher shall consider the students individual premises (UFD, 2009, §3-5).

Before KL 06 teachers could take into account the student individual premises in physical education when they assessed students. This was the instructions in Reform 94 and L-97. These instructions existed throughout the Norwegian education system until August 2006. After this, instructions stated that teachers could not take into account the student individual premises in the summative assessment in upper secondary school. These instructions did not regard lower secondary school. The Dept of education also stated that the student orderliness and behaviour assessment should not be drawn into the basis of assessment in each subject. It was only the student competence that should be assessed. It had to be a separate assessment of the students competence in the subject and the students overall orderliness and behaviour. This differentiation was done by the Dept of education to clarify the basis of the assessment criteria for the teacher. The general basis of assessment in Reform 94 was unclear for both
students and teachers and the government chose to get rid of the general part regarding the basis of assessment in the curriculum of L-97 (St.meld. nr 30, 2003/2004).

There were three new concepts worth noticing in KL 06. These were competence goals (kompetansemål), secondary goals (delmål) and criterion (kjennetegn). The competence goals were stated in the curriculum of KL 06 and described what the student should master at the end of the school year. With the basis of these competence goals teachers had to develop secondary goals on their own. The secondary goals needs to be developed to help the student reach the competence goals.

The criterion described the quality of the students’ competence in relation to the competence goals in KL 06. These criterions should express low, mediocrity and high ability, where low was the grade 1 and 2, mediocrity was the grade 3 and 4 and high ability was the grade 5 and 6. As to physical education it was recommended that teachers should use knowledge and skills in their assessments, but it was the choice of each school where the focus should be when it came to the weighting (balance/ vektingen) of these two (By, 2010).

The official curriculum, Reform 94, included a separate chapter regarding assessment, as mentioned earlier. This chapter described what assessment was, how teachers should assess and why there is assessment in school. The government was criticized for not doing that with KL 06 (By, 2010). The Dept of education therefore established a project called "Better assessment practice" with the aim of clarifying the instructions of assessment and contribute to a more justified assessment of the students work. This project was ended in June 2009. Physical education was not a part of this project, but the County Governor (Fylkesmann) in Oslo and Akershus took the initiative of the same work in physical education. They are still in the process, but have so far published a paper with examples of secondary goals and criterions (kjennetegn på måloppnåelse) (By, 2010).
The foundation of assessment can be illustrated by this model (By, 2010):

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The goals in the general curricula (L 97)
    └── Principles in the education (Læringsplakaten)
    └── Mutual goals in the curricula (Felles mål for faga)
      └── The competence goal in the subject (kompetansemålene i faga)
        └── Secondary goals in the subject (Delmål i faga)
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Figure 1 The foundation of assessment

In addition to this the foundation of assessment is based on the law of education (opplæringslova) which is detailed in the instructions (forskrifter) and the instructions is detailed in the circular letters (Rundskriv). The circular letters are official documents sent out from official government (Dept of education) when it is necessary to clarify and/or give additional information to the law of education or the instructions.

By (2010) emphasised that the competence goals had to be seen in relation with the objective of the subject (formålet med faget). The objective of the subject gives clear guidance on how to interpret and understand the competence goals.

By (2010) also stated that effort as a criteria was not gone, but replaced with the ability to do activities over and over again, keep up with hard physical activity for as long as possible, be positive towards fellow students and make them look good, show engagement and social commitment, and pass and be in a position to receive a pass.

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Examples By showed at physical education teachers seminar in Beitostølen 17th of January 2010
By (2010) also emphasised the importance of working with all of the competence goals throughout the whole school year. If you work with one competence goal and finished it long before the end of the school year you did not fulfil the intention of the instructions. You had to assess the students total achievement of all the competence goals by the end of the school year to fulfil the instructions.

Last, but not least she stated that you can not consider the student individual premises in your assessment, but use this premises in the adaptive education of the student.

4. 3 Theories of assessment
To find why the instructions of assessment in KL 06 became the way they were we have to look behind KL 06 and the instructions to find possible foundation from previous research and theories.

Paul Black & Dylan William (2004) and Linda Suskie (2001) can explain the intentions of KL 06 because they together emphasise why formative assessment is important and how assessment should be done. These theories were also important to my research questions because they may reflect and explain the relations, or the lack of relations between the instructions of assessment and the assessment practice in upper secondary schools in Vestfold and Telemark.

4. 3.1 Black & William - Formative assessment
A theoretical basis can be the research from Paul Black and Dylan William, both professors at Kings College in London.

This theory gives a good basis for why constant assessment (assessment for learning or formative assessment) is important. Assessment is described as “all those activities undertaken by teachers, and by their students, which provides information to be used as feedback to modify the teaching and learning activities in which they are engaged” (Black & William, 2004, p.10).

It is, although, important to separate two forms of assessments from each other: assessment of learning (assess the learning outcome at a given time) and assessment for learning (assess
learning outcome with the objective to improve this). Black and William (2004) believe that their assessment definition becomes formative (assessment for learning) when the information of the assessment is used to get the teaching activity to fit the needs which the assessment showed that the student have.

"Learning is driven by what teachers and students do in lessons. Teachers have to manage complicated and demanding situations, channelling the personal, emotional, and social pressures of a group of thirty or more youngsters in order to help them learn immediately and become better learners in the future" (Black and William in Gardner (ed.), 2006, p. 84).

There have been many initiatives where the aim was to improve learning outcome from the “Black Box” (Black and William, 1998). Black and William describes the Black Box as the classroom and/or the relationship between the teacher and the student. Many things are put into the box, like resources, management rules, requirements, tests, standards and much more. The outcome of the black box should be more knowledgeable and competent students. But how can we be sure of this? If no one knows what is happening inside the black box, except the teacher and his students, how can anyone expect that some inputs will give a given output? Furthermore, Black and William were also questioning why most of the reform initiatives are not aimed at giving direct help and support to the work of teachers in classrooms (Black and William, 1998)?

This last question, from Black and William, is very interesting, and most relevant also in Norway and for the work of PE teachers.

Example: In the student’s third year (VG3) one competence goal in KL-06 is as follows:

“The aim of the education is to master an individual sport and a team-sport” (UFD, 2005 p.156).

How shall PE teachers measure to what degree each student master badminton or basketball? What is a low degree of mastering, average degree of mastering and high degree of mastering?

Could the reform initiatives be aimed at given teachers a specification of standards (kjennetegn på måloppnåelse)? In that case the results (grade) would have been measured towards a standard. A high level of mastering badminton would then have, probably, been
assessed fairer and more similar whether you were a student in Oslo, Kristiansand or Porsgrunn.

When Black and William (1998) developed a theory of formative assessment they conducted an extensive survey of the research literature. More than one hundred and sixty journals and about 580 articles to study before they could develop a theory of formative assessment. They found out that there was evidence that improving formative assessment raises standards, and also evidence that there was room for improvement. Last, but not least, they found out that there also was evidence on how to improve formative assessment (Black and William, 1998).

What is formative assessment? Formative assessment can be described as a”self reflective process that intends to promote students attainment” (Crooks, 2001). Cowie and Bell (1999) define it as the bidirectional process between teacher and student to enhance, recognise and respond to the learning. Black and William consider an assessment formative when the feedback from learning activities is actually used to adapt the teaching to meet the learners needs.

Black and William described formative assessment in practice when teachers do this by serving students as they respond to questions, ask questions and interact with other students (Black and William, 1998, p.2). Black and William’s intention was to show that the following components form a framework which can be incorporated in, and illuminated by, a treatment of the subject classroom as an activity system. The following 4 components were important to develop formative assessment in each classroom (Black and William in Gardner (ed.), 2006):

First component: teachers, learners and the subject discipline
The classroom is the activity system and must be the starting point of any analyses. Inside this system there are several agents, the most important ones are the teacher and the student. This activity system needs a culture for changes, and not stability and continuity. Every analyse must also be specific to the subject discipline. It is the relationship between the teacher and his or her learners/student together with the subject discipline which is essential. They specially emphasised the importance of feedback in physical education.
Second component: the teacher's role and the regulation of learning
I have often experienced when I am planning my lessons that I ask myself what are the students going to do, instead of what are the students going to learn. The majority of teacher who have participated in the assessment initiatives of Black and William have done this shift when they plan their teaching. Each student has to take responsibility of his or her own learning. The teacher needs to equip students with the cognitive strategies required to achieve new understandings and skills through the subject. This implies giving well thought questions/assignments to the students, and give them time to reflect and respond to this. Some teachers may experience that these changes can be seen as a loss of control of the learning, but overall this will not be the case when it is implied that this changes in their conception is how learning were mediated by the teacher.

Third component: feedback and the student-teacher interaction
The interaction between the student and the teacher is, as mentioned earlier, crucial. Feedback from the student to the teacher and the feedback from the teacher to the student are important. The teacher should promote self assessment, and peers and group assessment. How to give feedback is dependent on the subject and of course the individual.

The zone of proximal development and differentiation is important when it comes to individualization. Each student is unique and every student has his or her own personality with different ways and ability to learn. It is the teacher’s task to find and defining the gap between what the learner can achieve without help and what may be achieved with suitable help (Vygodtsky, 1986). This is an enormous, but necessary job each teacher also has to do.

Fourth component: the students role in learning
The student's role in learning should be active towards learning and not passive receptors. Active learners take responsibility of their own learning and obtain the ability to organise this. As long as students believe that effort can not make much difference because of their lack of ability, effort to enhance their capability as learners will have little effect (Black and William in Gardner (ed.), 2006).

A teacher who participated in one of the projects of Black and William, which emphasised changes and formative assessment, told that her students felt that the pressure to succeed in
tests was being replaced by the need to understand the work that had been covered, and the test was just an assessment along the way of what needs more work and what seems to be fine. The students commented on the fact that they thought the teacher was more interested in the general way to get to an answer than a specific solution, but they decided this was so that they could apply their understanding in a wider sense (Black and William in Gardner (ed.), 2006, p. 91).

Cowie (2004) explored students reactions to formative assessment. One of her general findings was that students were in any activity balancing three goals simultaneously; completion of work tasks, effective learning and social relationship. If any of these came in conflict with each other students tend to prioritise the social relationship goals. The respect showed them by a teacher and their trust in that teacher affect students’ responses to any feedback. They needed to feel safe if they were to risk exposure (Black and William in Gardner (ed.), 2006). I believe this specially regards physical education in the gym where the risk of exposure is high compared to other subjects in ordinary classrooms.

It is clear that these changes in students’ role as active learners are a significant feature in the reform of classroom learning. To improve formative assessment further on there are some important additional factors.

*When the classroom culture focuses on rewards, grades or class ranking, then students tends to look for ways to obtain the best marks rather than to improve their learning. One reported consequence was that, when they had a choice, students avoid difficult tasks. What was needed was a culture of success, backed by a belief that all students can achieve. In this regard, formative assessment can be a powerful weapon if it is communicated in the right way.

*Black and William believed it was essential that any dialogue should evoke thoughtful reflection in which all students could be encouraged to take part, for only then can the formative process start to work. They explained that dialoguing between students and a teacher should be thoughtful, reflective, explore understanding and conducted so that all students have an opportunity to think and to express their ideas (Black and William, 1998).
In physical education I believe this means giving students time to train and explore the technique in a sport, and give them the opportunity to reflect on what works for them.

*It is better to have frequent short tests than infrequent long ones. It is very unproductive if students get low marks time after time, and they come to expect to get low marks next time. This cycle of repeated failure becomes a part of a shared belief between the students and his teacher. Feedback has been shown to improve learning when it gives each student specific guidance on strengths and weaknesses, preferably without any overall marks. Feedback on tests, seat work, and homework should give each student guidance on how to improve, and each student must be given help and an opportunity to work on the improvement (Black and William, 1998).

My experience in physical education is that when I give feedback like; "that was a good lay up, Kari, but try to hit the board first, not directly into the basket" has a great impact on learning. I believe the reason for that is positive and specific guidance on how to do better.

*According to Black and William (1998) a teacher's approach should start by being realistic and confronting the question: Do I really know enough about the understanding of my students to be able to help each of them? Further on it was important that the classroom culture was based on questioning and deep thinking, in which students learn from shared discussions with teachers and peers (Black and William, 1998).

If this can be translated into physical education I believe it is important to create a culture where the aim is to learn, and the focus is on training and trying rather than the fear of failure.

Black and Williams describe the following four steps to implementation: Learning from development → Dissemination → Reducing obstacles → Research.

Black and Williams declare that it is the responsibility of governments to take the lead. Success will clearly depend on co-operation among government agencies, academic researchers and school-based educators. The argument was that standards can be raised only by changes that are put into direct effect by teachers and students in classrooms. There is a body of firm evidence that formative assessment is an essential component of classroom work and that its development can raise standards of achievement. It is essential that national
4.3.2 Linda Suskie - Fair assessment

Linda Suskie is an internationally recognised speaker, writer and consultant of higher education assessment topics. She holds a masters in educational measurement and statistics and a bachelor's degree in quantitative studies. She has over 30 years of experience in institutional research and have several publications on assessment topics (Suskie, 2009).

Suskie (2001) gives a theoretical point of view on what is fair assessment. She demonstrates this in a seven step model:

1. **Have clearly stated learning objectives and share them with your students, so they know what to be expected from them.** Give the students guidance so they understand what the most important aims are. Give them information of the tasks and skills to be covered in the midterm and the measures you will use to assess their project.

   This means that the PE teachers should give the student a paper with an overview over what activities will be covered in the period ahead and their tasks in the same period. In this paper physical education teachers should tell their students what skills they expect them to learn and how you will assess those skills. For example: In the first and last session in each term I assess student skills and progress of the Beep-Test (a progressive running test). This is something every student is aware of, and they have the possibility to train between these tests.

2. **Match your assessment to what you teach and vice versa.** Do not expect your students to demonstrate good basketball skills; don't assume they have entered upper secondary school with those skills already developed. Give them an explanation and demonstration on good basket techniques and help them develop these skills.

3. **Use many different assessments.** Have various measurements so as many students as possible have the chance to be assessed in a way they feel comfortable. Any assessment gives inaccuracies, and it is better with often and small testing than seldom and big.

   After taking into consideration from a broad variety of assessments the evaluation should be based on our professional judgments as educators. For example: To measure students...
knowledge in physical education you can have written tests, multiple choice tests, training projects, student teacher interaction in classroom or in physical room, written assignments, oral questioning and so on.

4. **Help students to learn how to do the assessment task.** Do not assume that much information and explanation is overkill. There is evidence that much support gives the students work a higher quality. An example: In the third year in upper secondary school every student must have at least two training project of their own in physical education. I experiences that my students did better when I gave them previous training projects from earlier students who had done well.

5. **Engage and encourage your students.** The performance of "field-dependent" students, those who tend to think more holistic than analytic, is reasonably influenced by faculty expressions of confidence in their ability (Anderson, 1988). Give your students confidence in their ability. Your engagement encourages the students. Physical education is a subject with a lot of exposure of each student. It is not easy to be invisible and each student need to be given credit for their ability.

6. **Interpret assessment results appropriately.** It is often appropriate to base your assessment on a standard. Did the student give evidence for his or her knowledge? Was that basket-thrown in the category average of his level, and should he therefore have the grade 3 or 4? Did his training-project contain the elements which were asked for? This standard is often better than assessing the student on the base of comparing with other students or peers. It is not fair to deny a student a better grade because he/she is in a group with general high skills in physical education.

7. **Evaluate the results of your assessments.** Did you get disappointed by the result in the last test? Be open and ask them why they didn’t do well. You may find out the reason for the results. Maybe you didn’t teach a theme or a concept well enough, or the questions on the test were difficult to understand. There might also, of course, be other external or internal reasons for the results. Revise your assessment tools, your pedagogy, or both, and your assessments are bound to be fairer the next time you use them.
To be able to interpret the result of the assessment thoroughly it is necessary with a common understanding of which criteria one shall assess and the standards of the assessment (Suskie, 2001).

Black and Williams (2006) formative assessment and Suskies (2001) fair assessment was based on international research and can be used as a foundation for what we find in KL 06. Specially formative assessment was emphasised in KL 06, but also fair assessment. When physical education teachers shall assess the students skill only, not taking individual premises into account and keep orderliness and behaviour assessment outside the subject, was this most likely done with the intention of fairer assessment in KL 06 (Engh, 2007).

I will further on look at previous research, primary in Norway and Scandinavia.

4. 4 Previous research
There is some research nationally of assessment in physical education. One of the latest has been done by Vinje (2008).

He carried out a pilot research about assessment in physical education, in lower secondary and upper secondary school. His purpose with the research was to find tendencies and indications among teachers in physical education regarding their attitude and practice of assessment. The results implied 4 main tendencies: There was a big difference among teachers in how they made use of, and how they gave weight to the general assessment criteria. Effort was still used as a criterium among most of the teachers, despite the new instructions of assessment which rejects this practice. Many teachers' wanted a clarification on what shall be counted as relevant student premises. This clarification came august 2009: The teacher shall not considerate any student premises at all in the assessment in upper secondary. In lower secondary school it is vice versa (UFD, 2009).

Most of the teachers perceived the competence goals to be too wide. They wanted to a larger extent explicit minimum and standardized requirements for the students.
A majority of the teachers in the research stated that they didn't manage to give students formative assessment towards the competence goals in the subject. They had too many students and not enough time (Vinje, 2008).

A qualitative study on how PE teachers interpreted and practiced assessment after KL-06 (Jonskås 2009) showed that teachers believed that the competence goals were too wide and not concrete enough. It also showed that PE teachers had different understandings of the aim of assessment. One part had most focus on the end assessment, while the other part stated that assessment for learning was the main focus. The study implied that the school tradition of assessment had a great impact on how teachers incorporated their assessment practice. Her informants interpreted the new directions of assessment differently, especially when it came to the assessment criteria of effort, knowledge and skills. They all still used effort as assessment criteria.

Jonskås (2009) stated further that experienced teachers were more discontent than teachers less experienced in teaching at upper secondary level. She also pointed out that there were differences among schools when it came to internalize KL 06. Some schools had started to work with the new reform while other schools just had registered that a new reform had entered. The results also showed that there had been few courses offered to teachers regarding the implementation of KL 06.

Physical education teachers wanted the competence goals to be more standardized (Jonskås 2009). Results indicated a difference among teachers when it came to the amount of work they had put into criterion (kjennetegn på måloppnåelse). Physical education teachers had different points of view on assessment. One half of the teachers had their focus on the summative assessment while the other half meant that the formative assessment was the most important assessment. This indicates that the school culture and assessment traditions in each school was an important factor when teachers gain their assessment competence (Jonskås 2009).

The two researchers mentioned above indicated large differences among teachers referring to giving weight to the overall criteria. Vinje (2008) also indicated that teachers don’t have, either received, understood or implemented action regarding the instructions from the Department of Education (2007). It was emphasized that effort shall be assessed in the
orderliness grade and not in the subject of physical education, but By (2010) stated that effort as a criteria was not gone, only replaced (see page 16).

Changes in society often requires changes in school or in the way schools are conducted. A curricula reflects the society. What society thinks is important, valuable, desirable and meaningful will always influence every school (Gundem, 1990). KL 06 was made to make changes in the Norwegian school system. A new reform will not always lead to changes. Different factors can be a part and the teachers themselves can be one of these factors, leading to no changes. If the teachers are not willing to put in an extra effort to read, learn and work with the new reform, changes will not appear. Change was also not likely if teachers were satisfied with the old curricula and did not have faith in the new reform. When it came to assessment, teachers who had implemented the new curricula and the new instructions would naturally have a different assessment practice than teachers who had not done this work (Dalin, 1994).

Research shows that it takes time before there will be any changes in teachers practice when a new reform is introduced. A qualitative research from Norway done by Næss (1996) showed that his informant did not bother about the new reform and did his practice as he had done earlier. One other qualitative research studied teachers experiences towards the new reform, L 97, and showed that teachers was positive towards the new reform and the changes it had (Jacobsen m.fl., 2001).

There has also been done research on the Swedish curricula in physical education (Annerstedt and Patriksson, 1997). In 1994 the Swedish school system was introduced with a new reform and the research wanted to find out whether the results of the new reform was as expected. The new reform was only on two pages. This research stated that teachers were overall satisfied and had received the new reform with gratitude. 96% of the teachers responded that the subject had changed as a result of the new reform. When Annerstedt and Patriksson asked about the nature of the changes, the most common answer was that the amount of "theoretical studies" had increased. 15% responded that the subject had changed because "the way of assessing has changed". (Annerstedt and Patriksson, 1997).

In his quantitative research Peev (2001) looked at the way teachers sat grades in upper secondary schools in Telemark and Buskerud. His results indicated that teachers' assessment practice were not only influenced by the official documents, but also by factors as their experience, gender, size of the school and which line of study the teacher's works.

Kleiberg (2002) made a qualitative study from the teachers point of view and she wanted to understand the assessment practice of teachers teaching in physical education. Her results can be compared with the results of Peev. She also showed that teachers in physical education were influenced in their assessment practice by experience, school culture, tradition, colleagues and which line of study the teacher works.

In the project "Better assessment practice" (Dale, 2007) it is explained that implementing a new assessment practice in school can be a slow process. This statement also correlates with international research showing the same thing (UDIR, 2007). Engh, Dobson & Høihilder (2008) described in their book "Formative assessment" that governmental curricula are never executed slavish. This was the situation when teachers had no or little influence on the developing of a new reform. In second-hand, this could result in resistance and little willpower from teachers, especially if they were not agree what was written in the new curricula. In those cases the teachers practice will differ from the intention of the new reform.

A research regarding the implementation of KL 06 was done by Bomo (2008). He looked at the experiences among physical teachers in the first year (VG1) at upper secondary school. In this qualitative research he stated that teachers had different experiences with KL 06 and the
curricula of the first year in upper secondary school. The teachers were overall satisfied with the curricula, but there were also some challenges about it. The biggest challenge was the assessment of the students. Bomo (2008) stated that the government has to be clear at an early stage on how the assessment practice shall be carried out. The study also recognises that implementation will take time, but was overall very positive to the new reform, KL 06. He concluded that when time is up and the vaguenesses is cleared out, physical education will become a subject functional with the new KL 06.

If we summarise previous research shortly we find that there were wide differences among physical education teachers in their use of criteria and the weighting, and that the use of effort as a assessment criteria was still common among physical teachers. The school tradition and school culture had affect on the assessment of physical educators. Teachers believed that the competence goals were to wide and not concrete enough. Previous research also indicated that summative assessment was much more familiar and recognised by physical teachers than formative assessment. It also showed that assessment instructions from Reform 94 still was in use and the internalisation of KL 06 differs a lot among schools and physical educators.
4.5 A model for teachers assessment practice in physical education

Based on what is written and documented so far the following model can illustrate the teachers assessment practice in physical education today:

![Diagram of a model for teachers assessment practice](image)

**Teacher’s assessment practice**

- Reform 94
- Teacher’s experience
- School assessment culture
- School and subject premises
- Gender
- Colleagues
- School Dept/line of study

*Figure 2  A model for teachers assessment practice in physical education*

The model illustrates the factors teachers must consider when they assess. There are many factors and I experience that it is difficult to learn, understand and execute the intentions of KL 06, the law of education and the instructions. In addition to this teachers must assess
according to the competence goals in the subject together with the mutual goals in the curricula. On top of this we are influenced by colleagues, gender, subject premises, line of study, school assessment culture, our experience and Reform 94.

I will later on in the thesis discuss the model more explicitly.

4.6 Explanations of the research questions
I will now give a brief background for the research questions based on theory, previous research and discussion's in the subject physical education of today.

4.5.1 Main research question
How can the relations between the Instructions of Assessment in KL 06 ( approved by the Department of Education ) and the assessment practice in physical education in upper secondary schools in Vestfold and Telemark be described?

Black and William (2006) emphasises the importance of education when implementing a new reform. Teachers need time and knowledge to change their thinking and their way of work. The theory of Suskie (2001) claims that it was essential that each student must know the assessment criteria so they know what was expected of them. KL-06 was based on goal oriented assessment, while the two theories were much more based on task oriented assessment.

Previous research shows indications that most teachers still assess according to Reform 94 (Vinje, 2008; Jonskås, 2009).

4.5.2 Secondary research questions
Are the instructions of assessment well known to the physical education teachers?

Previous research (Vinje, 2008; Jonskås, 2009) indicated that the instructions were not well known to the teachers and that they did not have had the opportunity to be educated towards the new reform. Black and William (2006) also emphasised that this is a crucial factor when implementing a new reform. Teachers need time and knowledge to change their thinking and their way of work. This was also based on the principle of fair assessment by Suskie (2001).
She stated in her first step that it was important to have clearly stated learning outcomes and share them with your students so they know what you expect from them. Help them understand what your most important goals are. If the instructions of assessment in KL 06 is not clear for every teachers there is a high risk for different assessment practice among physical teachers.

If students do not know what the aim with each lesson is and they also don't know how they will be assessed in each lesson, the learning outcome will not be as good as it could be (Suskie, 2001). Both §3-11 and §3-12 (UFD, 2009) emphasised formative assessment and self assessment. This means that the student has to be aware of what criteria being used to assess them. In Suskies fourth step she stated; "Help students learn how to do the assessment task". If the teacher does not know which competence goals he will assess in the lessons it is most doubtful that the students will know which competence goals they are assessed towards.

To what degree do the physical education teachers believe that the instructions of assessment give a good basis for assessment practice in physical education in upper secondary school?

In Suskies (2001) third step she claimed it is important to use many different measures and many different kinds of measures. This is, of course, because of the differences of each individual student. When teachers in physical education can't take any individual condition or use the criteria effort in their assessment it may be looked at as unfair or incomprehensible. Also step number six is regarding this research question as well; “interpret assessments results appropriately and base your assessment on a standard” (Suskie, 2001).

If the instructions of assessment were well-known to teachers, do they feel they are able to fulfil these instructions? Previous research (Vinje, 2008; Jonskås, 2009) indicates that if the instructions were well-known to teachers they felt not able to fulfil them. Black and William (2006) stated that a new reform has to build up tools for the teachers and not the system outside the classroom.

Further on, Black and William (2006) explained the importance on the guidance and the process towards the competence goals. They emphasized the advantages of task oriented teaching in favour of the objective oriented teaching. Instead of focusing on the perfect throw or a pass, have focus on the elements and the tasks that leads to mastering a throw or a pass.
Independent from what P.E. teachers believe of the current instructions I wanted to examine what criteria they use when they give the grade 1 (failure/stryk).

What kind of criteria do P.E. teachers use when they give the grade 1?

This grade indicates that the student has failed the physical education course, and is very low in the achievement of the competence goals. The instructions in KL 06 do not give teachers instructions regarding this grade, other than "the grade 1 express that the student has a very low competence in the subject" (§3-4, UFD 2009). Suskie (2001) stated, as mentioned, in her first and sixth step that you need to have clearly stated learning outcomes and share them with your students so they know what you expect from them, and that you have to base your assessment on a standard. The students, and teachers, may wonder what is "a very low competence". In her second step she emphasised that you have to match your assessment to what you teach and vice versa (Suskie, 2001).

If students don't know what the aim of each lesson is and they also don't know how they will be assessed in each lesson, the learning outcome will not be as good as it could be. Both §3-11 and §3-12 (UFD, 2009) emphasised formative assessment and self assessment. This means again that the student has to be aware of what criteria and the standard which was being used to assess them.

How many lessons do physical education teachers need to have enough assessment foundation to be able to give a grade to a student in upper secondary school?

The instructions in KL 06 stated that students in upper secondary school has the right to be assessed. This right included formative assessment, summative assessment and the right to have it documented (§3-1, UFD, 2009). The instructions also stated that the teacher shall, as far as possible, obtain sufficient assessment foundation towards each student, so that the right the student has according to § 3-1 is being fulfilled. This right is also a fact if their absence or other specially reasons makes it difficult to assess the student, but a large amount of absence, lack of participation in assessment situations or other particularly reason can lead to IV (not able to assess /ikke vurderingsgrunnlag) in midterm report and/or in the end of the school year report (§3-3, UFD, 2009).
This means that if the teacher believes or feels that the student has not participated enough in his opinion in physical education he can choose not to give the student a grade (IV). There are no instructions to what degree this absence of participating should be before the teacher set a grade or IV. There are in fact no boundaries in the instructions when it comes to absence in the subject. This can result in very different practice among physical education teachers when and how they use "the grade"; not able to assess (IV).

Black and William (2006) described assessment as all those activities undertaken by teachers, and by their students, which provide information to be used as feedback to modify the teaching and learning activities in which they are engaged.

Among other things, this means that P.E. teachers need to give feedback to students and students need to be present and engaged in the activities, and the question is to what degree this participation is required to set a grade.

Is there a difference in the assessment practice between Vestfold and Telemark in physical education?

The instructions of assessment in KL 06 exist in all counties in Norway. There should not be any significant differences between the two counties in the assessment practice. If there is a difference this could contribute to valuable information regarding the implementation of KL 06 and the assessment practice to each of the two counties. Further on, it can give valuable information to my other secondary research questions and not at least give information of the relation between the instructions in KL 06 and the assessment practice of each county.

It could be argued that differences between the genders and education also was interesting to examine. I chose not to examine this for three reasons. First of all, the instructions apply to all physical teachers, independent of their gender and education. Second, if there is a difference I am not sure these results would gain the subject, the teachers or the students. I believe physical education teachers, independent of their sex and education, must pull together in the same direction to make the assessment practice as good, transparent and fair as possible. Last, but not least, I had to prioritize my analyses according to resources of time and space.
It could also be argued that I should have analysed which individual premises physical education teachers take into account when they assesses, but of the same last stated reason I did not. In addition, the instructions rejects this practice and I also wanted to have focus on my research questions. I am aware of that the results of this could be of a general interest and have therefore enclosed these results in appendix 8.

**4.7 Summary of theory**

I have now stated some of the central elements of assessment in the Norwegian school system of today in upper secondary school. To understand why the KL 06 and the instructions were as they were it was important to document foundations for this. These foundations, together with the instructions in KL 06, were also important to give answers towards my research questions. While Black and William (2006) emphasised why assessment is important, Suskie (2001) explained how assessment should be done. Previous research indicated that there were some challenges towards teachers assessment practice when implementing a new reform.

"Nothing is more important when it comes to students’ learning than the teacher. If we want to improve school, the best thing to do is to educate the teachers pedagogical-and assessments competence, reduce the time teachers spend on documentation and the breaking down of competence goals to knowledge-and skill goals. A systematic development in the bottom can prevent the shifting government in new failures" (My translation) (Engh, Roar, førstelektor, Høgskolen i Vestfold, Tønsbergs Blad 25/02-2010).
5.0 Method

In this chapter I will present my choice of method and substantiate this choice. Further on I will give a description of the quantitative method with its strength and weaknesses. The measuring instrument will be presented and I will describe the data collection and processing. At the end of the chapter I will look into the aspects of ethics, validity and reliability before I present the background data from the research.

5.1 Choice of method

Thornquist (2008) states that the choice of research method depends on the problem to investigate and the perspective of theoretical science. She distinguishes the perspectives between rationalism, empiricism, phenomenology and hermeneutic. Føllesdal & Walløe (2002) described two different methodology or ideal of science: nature science and hermeneutic. The nature science has a quantitative approach based on empiricism/positivism while the hermeneutic approach is qualitative and is based on phenomenology and hermeneutic.

Empiricism is known as a tradition which stated that experience is the source of knowledge and true information. It is all about what you can observe and measure. The physics is the ideal for all science and true information (Thornquist, 2008).

The choice of methodology depends first of all on my aim with the research. If my goal was to understand and interpret information I needed to use a qualitative approach. If the aim was to find, measure and explain connections and relations, the right approach would be quantitative.

I used a quantitative method to collect the data I needed. The character of my research question was the main argument for this decision. I wanted to find out how relations between the instructions of assessment and the assessment practice in Vestfold and Telemark could be described. I also wanted to find out in what degree the teachers' believed that the instructions gave a good basis for assessment practice in physical education. Further on I wanted to find out the criteria physical teachers used when they gave the grade 1 (failure/stryk) and how
many lessons physical education teachers needed to be able to assess students in upper secondary school. At last I wanted to look into eventually differences in the assessment practice between Vestfold and Telemark.

The main aim was to measure these findings and explain these relations, or lack of relations, towards the instructions of assessment approved by the Dept of education (UFD, 2009).

As a scientist and a researcher I didn't want to influence the results. The respondents had to answer the questions by themselves without my influence. The problem formulation was more suitable for statistics than analytical descriptions. I wanted to find and measure relations and links between instructions and practice, not interpret information. Economy and time were scarce resources to me. Through quantitative approach I could save time and money compared to a qualitative method (Johannessen m.fl, 2008).

A challenge with postal questionnaires was the risk of not getting (enough) questionnaires back, and also the possibility of doing an analytical description (Johannessen m.fl, 2008).

5.2 Participants

To measure how relations between the instructions of assessment and assessment practice in physical education in upper secondary schools in Vestfold and Telemark could be described, I needed to find answers among physical education teachers in this area. I did a quantitative postal cross section research in all upper secondary schools in Vestfold and Telemark. The total number of schools was 25.

I phoned each school in September-09 and got information of the e-mail address and phone number to the person in charge of physical education. I also got information regarding how many teachers that practiced in physical education at each school and was in active duty this actual school year. I did this all over again, following up, in January, to secure a high respond rate.

Totally there were 131 physical education teachers in these two counties by January 2010. Every physical education teacher in Vestfold and Telemark was invited to join the research, and this ensures data quality and representation. My selection was all the teachers who assess
students in physical education in all upper secondary schools in Vestfold and Telemark, over 15,000 students every year. Therefore the data material should reflect true information (Johannessen m.fl, 2008).

5.3 Measuring instrument

The starting point of my questionnaire development was Vinje’s (2008) pilot research from Oslo. KL 06, theory, and previous research as mentioned earlier, together with my research questions was also the basis of the questionnaire. I will here present these foundations. To substantiate this I will go through each question of the questionnaire (See appendix 4):

Background data

The aim of asking the participants which County they work in, their gender, education and in what level they work was to ensure that the respondents were representative. If this was a fact, I also had the opportunity to look at eventually differences between the counties, gender and education.

5.3.1 Main research question

To measure how the relations between the Instructions of Assessment in KL 06 (approved by the Department of Education) and the assessment practice in physical education in upper secondary schools in Vestfold and Telemark, can be described the participants were asked:

Question one: The foundation of summative assessment with a grade in physical education is all the competence goals in the subject. If you could break down this foundation in the criteria skills, knowledge and effort: How would you strike or estimate your weightings of these three criteria?

KL 06 emphasises that effort is no longer a criteria in the subject, only skills. If teachers still use effort as a criteria, this could indicate that there is a weak relation between the instructions of assessment and the assessment practice.

Question two and three: Estimate how many of your lessons (in %) you have secondary and/or criteria goals defined?

Estimate how many of your lessons (in %) you have secondary and/or criteria goals defined and the students are aware of these goals?
If a large amount of the teachers had 50% or more of their lessons with secondary goals and the students also were aware of these goals, this could indicate that they assessed according to the instructions.

Question four and five: Paragraph 3.3 of the Instruction in the law of education says that in upper secondary schools should not let students' individual premises count of the basis of assessment (obesity, asthma, injuries, etc.).

In what extent do you take into account the individual premises when assessing in physical education, and what do you think about this instruction?

If teachers took individual premises into account they did not assess according to the instructions, and if they did so, I wanted to measure what premises they took into account when they assessed. Whether they did this or not, I also wanted to measure what they thought about this instruction. If they thought this instruction was wrong it could indicate that the intentions of KL 06 were difficult to fulfill, and the implementation takes more time, when there is an amount of resistance.

Question six: Do you feel that you are able to give students guidance on how they are in relation to the achievement of objectives within the various competence goals in physical education?

If they were able to give this guidance to students they assess according to the instructions.

Ask yourself the following assertions:

-A student who has a high degree of skills for all the competence goals, but which shows a weak effort and attitude will never get better than grade 4.

This assertion was also measuring whether they assess according to the instructions or not. If effort and attitude were still a part of the criteria they used, the relation between the instructions and practice could be described as weak.
5.3.2 Secondary research questions

To measure the secondary research questions I asked the following questions (see appendix 4):

Are the instructions of assessment well-known to the physical education teachers?

Question seven, eight and nine: *To what degree do you know the instructions of assessment?*

If they were well known to the instructions it could indicate that they did not needed to be more educated towards the instructions of assessment.

To what degree do the physical education teachers believe that the instructions of assessment give a good basis for assessment practice in physical education in upper secondary school?

- The current Instructions provide a sound basis for assessment.
- Today's Instructions with local adaptation provides a good basis for assessment.
- Assessment is easier in physical education today than it was under Reform 94.

The three above assertions measured in what degree the instructions of assessment gave a good basis for assessment practice in physical education in upper secondary school.

What kind of criteria do P.E. teachers use when they give the grade 1 (failure/stryk)?

*Ask yourself the following assertions:*

- A student participating in physical education in 80% of the lessons will always get the grade 2 or better.

If it was enough to participate 80 % to pass in the subject this could indicate that teachers needed a lot of participation to be able to assess in the subject. If 80% was not enough participation to pass, this could indicate some of the practicing criteria for the grade 1.

- If a student has participated in at least one session throughout the school year, the student should at least get the grade 1.

This assertion also measured whether participation was a criteria for the grade 1 in the subject.
-If a student has participated in at least half of the lessons and I have assessed the student to a minimum of grade 2 in half of curriculum goals, the student will have grade 2 or better.

This claim measured whether participation and skill were used as a criteria for the grade 1, and the lessons teachers needed to have enough assessment foundation to be able to give students a grade.

How many lessons do physical education teachers need to have enough assessment foundation to be able to give a grade to a student in upper secondary school?

Estimate how many lessons you need to observe a student to have a scientific basis to give the person a grade in physical education.

I wanted to measure how many lessons teachers needed to assess students in physical education to be able to give the student a grade. KL 06 does not give any guidelines or instructions about this, as mentioned earlier.

5.4 Collecting and processing data

In September 2009 I contacted all 25 schools in Vestfold and Telemark and got the name for the contact person in the subject physical education, receiving phone numbers and e-mail addresses. In the thesis process I have also included my principal, the head of the subject in Vestfold county, my nearest leader and of course both of my own teaching supervisors. All of this was done to anchor the research and my master thesis. I also called each school again in December and January to follow up the research and asked if there were any questions, gave them my gratitude or asked them why they had not sent the questionnaires back. I also had my employer as a co-operate partner. Because of all this I hoped for an increased possibility of a high respond rate and that the results would get more attention.

I believed it was important to do the research just before the teachers sat the grades. As a teacher myself I experience that assessment work takes time and it is at this time teachers are concerned and really into the assessment theme. This was why I wanted do the research just in front of the midterm school report.

In my work with the questionnaire I emphasized that the answer options were equal and balanced in a way that no questions were misleading. To avoid context effects I went from general to specific. The neutral questions in the questionnaire were important so every answer
option was exclusive compared with the others, and that every question gave the possibility to
give a total answer. I sometimes included a rest category (other....) to secure the alternatives.
Most of my questions were closed, but because of my research questions I had to give the
respondents the possibility to explain their answers in some of the questions. All the questions
were concrete and most relevant for the respondents’ daily work. I had primarily made
cognitive questions about their own assessment practice, but some evaluation questions was
also presented (Johannessen m.fl, 2008). The Pre-test showed that the respondents used
between 10 and 25 minutes to complete the questionnaire.

The questionnaire started with easy and interesting questions, the middle part was a bit more
demanding and directed towards the thesis’ problem, and the end was simple and
comfortable. This could be decisive when it came to the respondents’ ability to complete the
form. Enclosed with the questionnaire there was a letter to the respondents which emphasized
the importance and the intention of this research, of the confidential and anonymous
contents, and the right for each respondent to refuse to participate (Johannessen m.fl, 2008)
(See appendix 2).

I had to do the pre-test in another county than Telemark and Vestfold because I was going to
do the research in all schools of those counties. I chose Buskerud for two reasons. It was
nearby and therefore minimising the travelling costs. Buskerud was similar in culture,
resources and framework as the counties where I was going to do the main research.

The pre-test, executed in early October 2009, showed that the questionnaire had a good
process before this pre-test. There were less questions and negativ feedback regarding the
questionnaire than I had expected. The pre-test was done at two high schools in Buskerud
County. I participated as an observer and as a guide in both of them. At the first school there
were five physical education teachers which responded to the pre-test. There were four minor
comments on the questionnaire, but everybody understood the questions and the answer
alternatives. I got positive feedback regarding the research and the questionnaire. They were
all eager to read the results and I had to promise to send it to them when I was done.

At my second visit at the other school in Buskerud County there were unfortunately only one
respondents who could participate. The other two participants were both sick and at home.
The participating respondent was done with the questionnaire within fifteen minutes and had only one comment. She wanted me to move one of the answer alternatives from the end to the middle in question five.

All the comments were noted in both my visits, and I edited it afterwards. With permission I taped the two pre-tests just in case I could lose some important oral information. In addition, the participants each had a sheet where they could mark their own comments if they did not wanted to say it out loud (appendix 6). There were no written comments from the pre-test participants, only a few oral comments as I mentioned above.

Afterwards I sent a box of chocolates to each of the physical education division in gratitude of their time used for my pre-test.

I also wanted to send out a box of chocolate to the schools who responded before deadline in my main research as well. For ethical reasons I was advised not to do this, but instead emphasise the importance of the research, and promise the results in return.

I sent out the questionnaires to all upper secondary schools in Vestfold and Telemark early in November 2009. Together with the questionnaires there was a following letter with further information about ethics and the survey (see appendix 2 and 4). There were also enclosed respond envelopes with return address and stamps so it would be easy to send it back to me. To secure a high respond rate I used e-mail and phone to remind the participants to send the questionnaire back before deadline. Out of 25 schools there were only 2 schools which did not return any questionnaires.

I wanted to use the software Questback, but this software was unfortunately not available. Instead I received the software SPSS 17 from Høyskolen I Telemark, and have used this to process my data.

5.5 Ethics, validity and reliability

Before I sent out the questionnaire I contacted Regional Committees for Medical and Health Research Ethics (REK) Of Norway. I told them about my study, and the ethics I had included; the participants had the right to refuse to participate, all the respondents were anonymous and
no personal information would be collected. They then told me to carry on with the survey and wished me good luck.

I had to be sure that my collected data was a representation of the phenomenon I wanted to investigate and that I measured what I believed was measured. I also had to be sure that the intentions of the research and the data material were according to my research problem. Selection of units, types of information, the choice of focus and instruments in collecting the data were important (Grønmo, 2004). During my research process I got feedback that my data reflect "face validity", but it was important to remember that "Data is not reality, only representation of it" (Johannessen, 2008).

I believe the reliability is ensured with what I have stated so far in this thesis. Reliability is the trustworthiness of the data, or how reliable the data is. This includes all the research data, what data being used, the collecting of the data and how they are processed (Johannessen, 2008). Some of my survey has also been done earlier in Oslo, by Vinje (2008).

According to the formulated problem in my thesis, assessment practice is a dependent variable, while The Instructions of assessment is an independent variable. I made both an univariate and bivariate data analysis so I could find frequencies and sentral tendencies.

5. 6 Background data – Results

I will in this part present the backgrounds data of my research. A total of 82 physical education teachers from Vestfold and Telemark responded and sent back the questionnaire within 1st of February 2010. The total population of physical education teachers in this area was 131 by January 2010, a 63% respond rate. Out of 25 schools there were 23 schools that responded and sent questionnaires back. I will first present the background data and then shortly comment this.

In what County do you teach physical education?
52% of the respondents were physical education teachers from upper secondary schools in Vestfold and 48% were from Telemark. This was almost the same percentage respond from each county and that ensures representation.

What is your gender?
52% were male physical education teachers.
Both County and gender frequency was nearby half by half, which indicate representative data of those categories.

*In what levels in upper secondary school do you teach?*

The results showed that there was very common to teach in more than one level for each teacher. Over 80% of physical education teachers taught in VG1 and/or VG2. 62% taught in VG3. There are less VG3 students compared to VG1 and VG2, and therefore less teachers teaching level VG3 than VG1 and VG2.

*Your education?*

Almost 6 out of 10 had the education level Adjunkt (4-5 years in university) and less than 2 out of 10 had the education level Lektor (more than 5 years at university with a master degree). 23% had a depth of physical education in their degree. One respondent did not answer the question and no one answered that they did not have any education (ufaglært). 5% had a half year of education in addition to their Adjunkt level and one respondent had a depth of physical education in his Adjunkt level.
6.0 Results

I will in this part first present the main research question with frequencies and other statistic goals in tables and then shortly comment and explain these results. I will then do the same with the secondary research questions.

6.1 Main research question

How can the relations between the Instructions of Assessment in KL 06 (approved by the Department of Education) and the assessment practice in physical education in upper secondary schools in Vestfold and Telemark be described?

Tabell 1 Statistics of the criteria Skills, Knowledge and Effort

<table>
<thead>
<tr>
<th></th>
<th>Vekting av Ferdighet i vurderingen</th>
<th>Vekting av Kunnskap i vurderingen</th>
<th>Vekting av Innsats i vurderingen</th>
</tr>
</thead>
<tbody>
<tr>
<td>N Valid</td>
<td>82</td>
<td>82</td>
<td>82</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mean</td>
<td>51.0893</td>
<td>24.5649</td>
<td>24.4429</td>
</tr>
<tr>
<td>Median</td>
<td>50.0000</td>
<td>25.0000</td>
<td>25.0000</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>15.47290</td>
<td>8.17632</td>
<td>15.43809</td>
</tr>
</tbody>
</table>

The mean of using skill as a criteria was just above 51%, while the mean of effort and knowledge were almost the same. Worth noticing is that skill and effort had almost twice as much standard deviation than knowledge. This indicates a wide range of different use of the criteria skill and effort among physical teachers in Vestfold and Telemark.

The frequency data of these three criteria shows a wide range of use (See appendix 7). Some physical education teachers weights skills with 10 or 20% while others were weighted the same criteria 80%. The range was 10-80%.

Almost 15% were not using effort as a criteria in their summative assessment, while 19% were using effort in over 4/10 in their weighting of the assessment with grade. The range was 0-70%.
Over 85% use weighting of knowledge less than 33% of the three criteria. Knowledge as a criteria had a smaller range than the other two. The range of the criteria knowledge was 10-50%.

**Tabell 2 Lessons (in %) teachers have secondary and/or criteria goals defined**

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Frequency</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid 0-25%</td>
<td>13</td>
<td>15.9</td>
<td>15.9</td>
</tr>
<tr>
<td>25-50%</td>
<td>25</td>
<td>30.5</td>
<td>46.3</td>
</tr>
<tr>
<td>50-75%</td>
<td>26</td>
<td>31.7</td>
<td>78.0</td>
</tr>
<tr>
<td>75-100%</td>
<td>18</td>
<td>22.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>82</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

The mean was 2.60 which gives an average closer to the answer option 50-75% than the answer option 25-50%.

84% of the physical education teachers had more than one out of four of their lessons with goals that the students shall work with, but only 22% had goals in more than three out of four lessons.

**Tabell 3 Lessons (in %) teachers have secondary and/or criteria goals defined and the students are aware of these goals**

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Frequency</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid 0-25%</td>
<td>13</td>
<td>16.0</td>
<td>16.0</td>
</tr>
<tr>
<td>25-50%</td>
<td>29</td>
<td>35.8</td>
<td>51.9</td>
</tr>
<tr>
<td>50-75%</td>
<td>28</td>
<td>34.6</td>
<td>86.4</td>
</tr>
<tr>
<td>75-100%</td>
<td>11</td>
<td>13.6</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>81</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

The mean was 2.46 which gives an average between the answer option 50-75% and the answer option 25-50%. It looks like the tendency was a bit dropping when the students had to
be aware of the goals in the lessons. Despite that, 48% of the teachers expressed that their students were aware of the competence goals they worked with in over half of all the lessons.

Tabell 4  Take into account the individual premises in the assessment

(Tar hensyn til individuelle elevforutsetninger i vurderingen)

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ingen grad</td>
<td>9</td>
<td>11.0</td>
</tr>
<tr>
<td>Liten grad</td>
<td>43</td>
<td>52.4</td>
</tr>
<tr>
<td>Stor grad</td>
<td>30</td>
<td>36.6</td>
</tr>
<tr>
<td>Total</td>
<td>82</td>
<td>100.0</td>
</tr>
</tbody>
</table>

89% of physical teachers in upper secondary schools in Vestfold and Telemark take individual premises into account when they assess students, in a small or a large extent.

Tabell 5  What do teachers think about not let student premises count of the basis of assessment?

(Hva mener lærere om ikke å ta hensyn til ind. forutsetninger?)

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Det er helt riktig</td>
<td>14</td>
<td>17.1</td>
</tr>
<tr>
<td>Det er feil. Vi må ta hensyn til individuelle forutsetninger i dette faget</td>
<td>53</td>
<td>64.6</td>
</tr>
<tr>
<td>Vet ikke</td>
<td>4</td>
<td>4.9</td>
</tr>
<tr>
<td>Annet</td>
<td>11</td>
<td>13.4</td>
</tr>
<tr>
<td>Total</td>
<td>82</td>
<td>100.0</td>
</tr>
</tbody>
</table>

65% of the respondents believed it were wrong not to take individual premises into account when assessing in physical education. 17% believed it were appropriate. 5% did not know and 13% used the answer option "other", which can be summarised like this; it is hard and difficult not to do this, especially when the student is undeserved of his individual premises.
55% stated that they try to do this, but were uncertain of their success in this project. 32% of physical education teachers in Vestfold and Telemark told that they do not have enough time to give students guidance towards the competence goals or they believed that this was too difficult and were not able to do this. 4% believed that they manage this guidance and 9% to a certain extent.

The mean is 3.00, which gives the answer option "uncertain" to be the average.
48% of the respondents were totally or partially agreed that a student who has a high degree of skill for all the competence goals, but which shows a weak effort and attitude will never get better than grade 4. 43% were totally or partially disagreed with this claim.

6.1.1 Summary of main research question results
The results of the main research question indicates different assessment practice among physical education teachers in upper secondary schools in Vestfold and Telemark. The data indicated that the instructions were not being fulfilled in general. The mean of using skill as a criteria was just above 51%, while the mean of effort and knowledge were almost the same, respectively 24% and 25%. Skill and effort had almost twice as much standard deviation than knowledge. This could indicate a wide range of different use of the criteria skill and effort among physical teachers in Vestfold and Telemark.

The mean of lessons teachers have secondary goals/criteria, and the students are aware of these goals, indicated to be just below 50%.

85% were still using effort as an assessment criteria. Almost 9 out of 10 of physical education teachers still took individual premises into account when they assess, and 65% believes it was wrong not to do so.

87% do not manage or were uncertain whether they master to guide the student towards the competence goals. Further on, over half of the respondents had less than half of their lessons without the students awareness of what competence goals they were working towards. At last, the teachers had a split decision whether a student with high skills, but lack of effort and attitude, should have a average or a high grade (4 or 5/6) in physical education.

The relations between the Instructions of Assessment in KL 06 (approved by the Department of Education) and the assessment practice in physical education in upper secondary schools in Vestfold and Telemark could be described as weak.
6.2 Secondary research questions

I will now present the results of the secondary research questions. When mean is presented I have left out the "do not know" and the "can not pinpoint" responses from the data material.

Are the instructions of assessment well-known to the physical education teachers?

Tabell 8  Are the instructions of assessment well-known to the physical education teachers?

(Kjenner lærerne til forskriftene for vurdering?)

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vald  Ja, meget godt</td>
<td>21</td>
<td>25.9</td>
<td>25.9</td>
</tr>
<tr>
<td>Vald  Ja, men skulle gjerne kunnet mer</td>
<td>37</td>
<td>45.7</td>
<td>71.6</td>
</tr>
<tr>
<td>Vald  Ja, men synes forskriftene er uklare</td>
<td>18</td>
<td>22.2</td>
<td>93.8</td>
</tr>
<tr>
<td>Vald  Nei, ikke godt nok</td>
<td>5</td>
<td>6.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Vald  Total</td>
<td>81</td>
<td></td>
<td>100.0</td>
</tr>
<tr>
<td>Missing</td>
<td>99</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>82</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

94% of the respondents expressed that they were known to the instructions of assessment.

45% of physical education teachers, although they were known to the instructions, wished they had more knowledge of these instructions and 22% were known to the instructions, but believed that the instructions was not clear enough. 26% stated that they know these instructions very well and 6% expressed that they do not know the instructions well enough.
To what degree do the physical education teachers believe that the instructions of assessment give a good basis for assessment practice in physical education in upper secondary school?

**Tabell 9** The current Instructions provides a sound basis for assessment

(Dagens forskrifter gir et godt grunnlag for vurdering)

<table>
<thead>
<tr>
<th>Valid</th>
<th>Frequency</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Helt enig</td>
<td>2</td>
<td>2.5</td>
<td>2.5</td>
</tr>
<tr>
<td>Delvis enig</td>
<td>16</td>
<td>20.3</td>
<td>22.8</td>
</tr>
<tr>
<td>Usikker</td>
<td>15</td>
<td>19.0</td>
<td>41.8</td>
</tr>
<tr>
<td>Delvis uenig</td>
<td>26</td>
<td>32.9</td>
<td>74.7</td>
</tr>
<tr>
<td>Helt uenig</td>
<td>19</td>
<td>24.1</td>
<td>98.7</td>
</tr>
<tr>
<td>Vet ikke</td>
<td>1</td>
<td>1.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>79</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Missing 99

System 2

Total 3

Total 82

The mean is 3.56, which gives an average between the answer options "uncertain" and "partially disagree".

23% of physical education teachers in upper secondary schools in Vestfold and Telemark believed that the current instructions provides a sound basis for assessment, but 57% believed that they did not. 20% were uncertain or did not know.
The mean here is 3.23, which is a bit closer to the answer option "uncertain" than the previous table.

39% of physical education teachers in upper secondary schools in Vestfold and Telemark disagreed totally or partially that the current instructions with local adaptions provides a good basis for assessment, while 35% were partially or totally agree. 26% were either uncertain or did not know.
Tabell 11  Assessment of physical education is easier today than it was under Reform 94

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Helt enig</td>
<td>3</td>
<td>3.8</td>
<td>3.8</td>
</tr>
<tr>
<td>Delvis enig</td>
<td>6</td>
<td>7.6</td>
<td>11.4</td>
</tr>
<tr>
<td>Usikker</td>
<td>10</td>
<td>12.7</td>
<td>24.1</td>
</tr>
<tr>
<td>Delvis uenig</td>
<td>17</td>
<td>21.5</td>
<td>45.6</td>
</tr>
<tr>
<td>Helt uenig</td>
<td>28</td>
<td>35.4</td>
<td>81.0</td>
</tr>
<tr>
<td>Vet ikke</td>
<td>15</td>
<td>19.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>79</td>
<td></td>
<td>100.0</td>
</tr>
<tr>
<td>Missing 99</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>System</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>82</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The mean is 3.95 and the average is very close to the answer option "partially disagree".

57% was totally or partially disagreeing that assessment of physical education is easier today than it was under Reform 94, while 11% was totally or partially agree. 32% was uncertain, or did not know, regarding this claim.
What kind of criteria do P.E. teachers use when they give the grade 1 (failure/stryk)?

Tabell 12  A student who participates in P.E in 80% of the lessons will always get the grade 2 or better
(80% deltagelse gir karakter 2 eller bedre)

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Helt enig</td>
<td>37</td>
<td>45.1</td>
<td>45.1</td>
</tr>
<tr>
<td>Delvis enig</td>
<td>24</td>
<td>29.3</td>
<td>74.4</td>
</tr>
<tr>
<td>Delvis uenig</td>
<td>3</td>
<td>3.7</td>
<td>78.0</td>
</tr>
<tr>
<td>Helt uenig</td>
<td>16</td>
<td>19.5</td>
<td>97.6</td>
</tr>
<tr>
<td>Vet ikke</td>
<td>2</td>
<td>2.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>82</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

The mean is 2.21. This indicates that the average is close to the answer option "partially agree".

74% were totally or partially agree that a high degree of participation gives the grade 2 (pass /bestått) or better. 20% totally disagree with that.

Tabell 13 If a student has participated at least one session throughout the school year the student will at least have the grade 1
(Dersom en elev har deltatt minimum en økt gjennom skoleåret skal eleven minst ha kar. 1)

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Helt enig</td>
<td>6</td>
<td>7.3</td>
<td>7.3</td>
</tr>
<tr>
<td>Delvis enig</td>
<td>1</td>
<td>1.2</td>
<td>8.5</td>
</tr>
<tr>
<td>Usikker</td>
<td>1</td>
<td>1.2</td>
<td>9.8</td>
</tr>
<tr>
<td>Delvis uenig</td>
<td>4</td>
<td>4.9</td>
<td>14.6</td>
</tr>
<tr>
<td>Helt uenig</td>
<td>69</td>
<td>84.1</td>
<td>98.8</td>
</tr>
<tr>
<td>Vet ikke</td>
<td>1</td>
<td>1.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>82</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

The mean is 4.59 and the average is therefore closer to the answer option "totally disagree" than "partially disagree".

84% of the physical education teachers answered that participation in one session throughout the school year was not enough to get grade 1 (not pass). 7% answered that participation in one session was enough.
Tabell 14: If a student has participated in at least half of the teaching and I have assessed the student to a minimum of grade 2 in half of the curriculum goals, students will have grade 2 or better

(Dersom en elev har deltatt i minst halvparten av und. og vur. til kar. 2 i halvparten av LP-målene skal han ha kar. 2 eller bedre)

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Helt enig</td>
<td>13</td>
<td>16.3</td>
<td>16.3</td>
</tr>
<tr>
<td>Delvis enig</td>
<td>23</td>
<td>28.8</td>
<td>45.0</td>
</tr>
<tr>
<td>Usikker</td>
<td>15</td>
<td>18.8</td>
<td>63.8</td>
</tr>
<tr>
<td>Delvis uenig</td>
<td>9</td>
<td>11.3</td>
<td>75.0</td>
</tr>
<tr>
<td>Helt uenig</td>
<td>18</td>
<td>22.5</td>
<td>97.5</td>
</tr>
<tr>
<td>Vet ikke</td>
<td>2</td>
<td>2.5</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missing</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>System</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>101</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The mean is 2.95 and is close to the answer option "uncertain"

44% of physical education teachers were totally or partially agree that students who had participated in at least half of the lessons and had been assessed to at least grade 2 in half of the competence goals should have the grade 2 or better. 33% of the respondents totally or partially disagree with that. 21% were uncertain, or did not know what to answer, about this claim.
How many lessons do physical education teachers need to have enough assessment foundation to be able to give a grade to a student in upper secondary school?

Tabell 15  How many lessons do physical education teachers need to observe a student to have a scientific basis to give a grade to the person?

(Mange undervisningstimer må kroppsvæningslærere observere for å kunne gi karakter?)

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 undervisningstimer</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>10 undervisningstimer</td>
<td>13</td>
<td>16.0</td>
</tr>
<tr>
<td>20 undervisningstimer</td>
<td>20</td>
<td>24.7</td>
</tr>
<tr>
<td>40 undervisningstimer</td>
<td>9</td>
<td>11.1</td>
</tr>
<tr>
<td>Kan ikke tidfestes</td>
<td>33</td>
<td>40.7</td>
</tr>
<tr>
<td>Vet ikke</td>
<td>3</td>
<td>3.7</td>
</tr>
<tr>
<td>99</td>
<td>1</td>
<td>1.2</td>
</tr>
<tr>
<td>Total</td>
<td>81</td>
<td>100.0</td>
</tr>
<tr>
<td>Missing</td>
<td>System</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>82</td>
<td></td>
</tr>
</tbody>
</table>

The mean is 20.41. Physical education teachers in Vestfold and Telemark, who could pinpoint, needs 20.41 lessons in average to have a scientific basis to give a grade.

43% of physical education teachers in upper secondary schools in Vestfold and Telemark needed 20 lessons or less to have a scientific basis to give a grade (1-6) to the student in physical education. 40% could not pinpoint the lessons they need to have a foundation for assessment. 11% needed 40 lessons, and no one needed 60 lessons.
Is there a difference between Vestfold and Telemark in the assessment practice in physical education?

**Tabell 16  Report: The criteria Skill, Effort and Knowledge in respectively counties**

(Statistikk over kriteriene ferdighet, innsats og kunnskap i respektive fylker)

<table>
<thead>
<tr>
<th>County</th>
<th>Vekting av Ferdighet i vurderingen</th>
<th>Vekting av Innsats i vurderingen</th>
<th>Vekting av Kunnskap i vurderingen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vestfold</td>
<td>Mean 54.8060</td>
<td>21.0851</td>
<td>24.3409</td>
</tr>
<tr>
<td></td>
<td>Std. 14.06834</td>
<td>15.08290</td>
<td>7.62998</td>
</tr>
<tr>
<td></td>
<td>Median 50.0000</td>
<td>25.0000</td>
<td>25.0000</td>
</tr>
<tr>
<td></td>
<td>N 43</td>
<td>43</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>Minimum 20.00</td>
<td>.00</td>
<td>10.00</td>
</tr>
<tr>
<td></td>
<td>Maximum 80.00</td>
<td>70.00</td>
<td>50.00</td>
</tr>
<tr>
<td>Telemark</td>
<td>Mean 46.9913</td>
<td>28.1451</td>
<td>24.8118</td>
</tr>
<tr>
<td></td>
<td>Std. 16.08426</td>
<td>15.15794</td>
<td>8.83384</td>
</tr>
<tr>
<td></td>
<td>Median 40.0000</td>
<td>30.0000</td>
<td>25.0000</td>
</tr>
<tr>
<td></td>
<td>N 39</td>
<td>39</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>Minimum 10.00</td>
<td>.00</td>
<td>10.00</td>
</tr>
<tr>
<td></td>
<td>Maximum 75.00</td>
<td>70.00</td>
<td>40.00</td>
</tr>
<tr>
<td>Total</td>
<td>Mean 51.0893</td>
<td>24.4429</td>
<td>24.5649</td>
</tr>
<tr>
<td></td>
<td>Std. 15.47290</td>
<td>15.43809</td>
<td>8.17632</td>
</tr>
<tr>
<td></td>
<td>Median 50.0000</td>
<td>25.0000</td>
<td>25.0000</td>
</tr>
<tr>
<td></td>
<td>N 82</td>
<td>82</td>
<td>82</td>
</tr>
<tr>
<td></td>
<td>Minimum 10.00</td>
<td>.00</td>
<td>10.00</td>
</tr>
<tr>
<td></td>
<td>Maximum 80.00</td>
<td>70.00</td>
<td>50.00</td>
</tr>
</tbody>
</table>

*p < .05 for both Skill and Effort.*

The mean weighting of skill as an assessment criteria in Telemark (47%) was almost 8 percent points below Vestfold (55%), while the mean weighting of effort was 7 percent points higher in Telemark (28%) than Vestfold (21%).
The mean is 2.81 for Vestfold and 2.36 for Telemark. This indicates that the physical education teachers in upper secondary schools in Telemark have fewer lessons with secondary goals than Vestfold.

The mean is 2.12 in Vestfold and 2.41 in Telemark, which indicates that Telemark take individual premises into account when they assesses in a larger extent than Vestfold.
77% of the respondents from Vestfold take no or little individual premises into account when they assess the students, while 49% of the respondents from Telemark did the same. Over half of the physical education teachers in Telemark took individual premises into account in a high degree when they assessed, while 23% in Vestfold did the same.

Tabell 19  If a student has participated at least one session throughout the school year the student will at least have the grade 1 * County Crosstabulation

<table>
<thead>
<tr>
<th>Dersom en elev har deltatt minimum en økt gjennom skoleåret skal eleven minst ha kar.1</th>
<th>County</th>
<th>Vestfold</th>
<th>Telemark</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Helt enig</td>
<td>Count</td>
<td>0</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>% within County</td>
<td>.0%</td>
<td>15.4%</td>
<td>7.3%</td>
<td></td>
</tr>
<tr>
<td>Delvis enig</td>
<td>Count</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>% within County</td>
<td>.0%</td>
<td>2.6%</td>
<td>1.2%</td>
<td></td>
</tr>
<tr>
<td>Usikker</td>
<td>Count</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>% within County</td>
<td>.0%</td>
<td>2.6%</td>
<td>1.2%</td>
<td></td>
</tr>
<tr>
<td>Delvis uenig</td>
<td>Count</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>% within County</td>
<td>4.7%</td>
<td>5.1%</td>
<td>4.9%</td>
<td></td>
</tr>
<tr>
<td>Helt uenig</td>
<td>Count</td>
<td>41</td>
<td>28</td>
<td>69</td>
</tr>
<tr>
<td>% within County</td>
<td>95.3%</td>
<td>71.8%</td>
<td>84.1%</td>
<td></td>
</tr>
<tr>
<td>Vet ikke</td>
<td>Count</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>% within County</td>
<td>.0%</td>
<td>2.6%</td>
<td>1.2%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Count</td>
<td>43</td>
<td>39</td>
<td>82</td>
</tr>
<tr>
<td>% within County</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td></td>
</tr>
</tbody>
</table>

$p < .05$

The mean is 4.18 in Telemark and 4.95 in Vestfold. This could indicate that Vestfold needs more participation to set a grade than Telemark.

All of the participants from Vestfold expressed that it was not enough to participate in one lesson throughout the school year to have the grade 1. 77% from Telemark stated the same.

The rest of the analyses between the two counties gave non-significant differences.

6.2.1 Summary of secondary research questions results
94% of the total respondents were known to the instructions of assessment, but almost half of them wished they had known more and 22% thought that the instructions were unclear.
57% believed that the current instructions do not give a good basis for assessment. With local adaptations, 39% still believed that, but 35% stated the instructions then gives a good basis for assessment. 57% of physical education teachers also said that practice assessment where easier under Reform 94 than today, and 11% expressed that it was the other way around. The mean showed that with local adaptations the average was close to the answer option "uncertain", but it also revealed that the respondents were "partially disagreeing" that assessment was easier today than during Reform 94.

3 out of 4 physical education teachers expressed that a high grade of participation in the lessons was enough to have the grade 2 (pass/bestått), while under 1 out of 4 was not agree with that. One session was not enough to get the grade 1, stated 84% of the respondents. Further on, 44% of the teachers expressed that a student who has participated in at least half of the lessons and have been assessed to a minimum of grade 2 in the half of the competence goals will have the grade 2 or better. When teachers gives the grade 1, this study indicates that participation is then an important criteria. Other eventually criteria for the grade 1 have not been examined in this study.

The mean showed that the physical education teachers, who could pinpoint the lessons they needed, had to have 20,41 lessons in average to obtain enough assessment foundation to set a grade. The physical education teachers who responded in Vestfold and Telemark expressed that 43% of them needed 20 lessons or less to have a scientific basis to give a grade to the person in physical education. 40% could not pinpoint the lessons they needed.

The use of the criteria skill and effort gave significant differences (p < .05) between Vestfold and Telemark. Also the amount of lessons with secondary goals, taking into account the individual premises in the assessment and the amount of lessons needed to set a grade gave significant differences (p < .05) between the two counties.

The results indicates that the assessment practice in Vestfold seems to have stronger relations to the instructions of assessment in KL 06 than Telemark, and that Telemark needs less student participation to set the grade 1 than Vestfold.
7.0 Discussion

The aim with this study was to examine how the relations between the instructions of assessment in KL 06 and the assessment practice in physical education at upper secondary schools in Vestfold and Telemark could be described. Further on, the study wanted to look into whether the instructions of assessment were well-known to physical education teachers, what kind of criteria physical education teachers use when they give the grade 1 (failure/stryk) and how many lessons physical education teachers need to have enough assessment foundation to be able to give a grade to a student in upper secondary school. At last this study wanted to explore possible differences in the assessment practice in physical education between Vestfold and Telemark.

This chapter presents a discussion of the results in previous chapter. These results will be discussed towards the theories, research questions and previous research.

The main research question will be discussed before the secondary research questions and every research question will have its own summary.

7.1 Main research question

How can the relations between the Instructions of Assessment in KL 06 (approved by the Department of Education) and the assessment practice in physical education in upper secondary schools in Vestfold and Telemark be described?

The results of this research indicate that the instructions of assessment have a wide range of uses. Some physical education teachers were weighting the criteria skill with 80% and other just 10-20%. The mean was 51%. It was the same tendency of range with the criteria of effort, with a mean of 25%. The mean of lessons which teachers have secondary goals/criteria, and the students are aware of these goals, indicated to be just below 50%.

Other results of this research indicate the same phenomena: The range of the assessment practice in general among physical teachers was split and/or divided. I have in this study not examined why, but previous research showed that the lack of a standard and minimum
requirements in the instructions of assessment could be an important explanation (Vinje, 2008; Jonskås, 2009).

The intention of KL 06 was, among other things, to make it easier to assess and give more freedom in the assessment practice than earlier (UFD, 2005; Imsen, 2006; By, 2010; Jonskås, 2009).

To base your assessment on a standard was a central element of fair assessment (Suskie, 2001). KL 06 gives each school/teacher the task to develop criteria with the aim of reaching the competence goals for all the students (By, 2010; UFD, 2005). When this standard is developed at each single school/teacher there is a risk that the standard will be very different between schools. Then there is a question whether the grade in physical education reflects justice and is transparent to other comparable students.

Previous research shows that there are many factors that can influence on the assessment practice (see model on page 30). The assessment competence in the education of teachers was weak. The teachers attain their assessment competence when they start to work in school. The school assessment culture then becomes crucial to that teachers own assessment practice (Ottesen, 1994; Brattenborg, 1995). Assessment practice was also influenced by experience, gender, school size, tradition, line of study and colleagues (Peev, 2001; Kleiberg, 2002). In addition to this previous research also shows that lack of influence by teachers towards a new reform can give resistance, which again can lead to little or no changes (Engh, 2008). It takes time to make changes when a new reform is introduced (Næss, 1996). Dale (2007) shows that implementing a new reform can be a slow process, and also Bomo (2008) reveals this about KL 06, but the major challenge in KL 06 was assessment. The results of this showed that the teachers were in general satisfied with KL 06, but the government must be very clear about the assessment practice on an early stage. The implementation will take time, but physical education and KL 06 will be a good match in the future (Bomo, 2008).

Jacobsen (2001) and Annerstedt and Patriksson (1997) showed that new reform also can be introduced to teachers with gratitude.
There are many factors that influences the assessment practice and the implementation of a new reform. I have in this study results that indicates a weak relation between the instructions of assessment in KL 06 and the assessment practice in physical education in upper secondary schools in Vestfold and Telemark. This indication is based upon previous research compared to the results presented here.

The use of Effort as criteria
According to the results in this research 85% of the respondents still used effort as a criteria in their assessment in physical education in upper secondary school. The weighting of this criteria has a wide range of use and the mean of weighting effort was 24.44%.

48% of physical education teachers would not give a student a grade better than 4, despite that the student has a high degree of skill on all the competence goals, but showed a weak effort and attitude. This indicates that a student with outstanding competence of skills and knowledge in general, but a weak effort and attitude, would not get better than grade 4 from almost half of the physical education teachers in Vestfold and Telemark.

Jonskås (2009) showed that every informant she had stated that they used effort as a criteria and that it was difficult not to do so when they assessed students. This study also revealed that the informants experienced unclear signals from the Dept of education regarding the use of effort as a criteria.

Vinje (2008) showed that 100 % used effort as a criteria and the mean of weighting this criteria was 35% among physical teachers in upper secondary schools. In lower secondary schools there were 98% that used effort as a criteria and the mean among them was 41% of the criteria effort.

If we compare the studies mentioned above with the results of my study, when it comes to the weighting of effort, it seems that the relation to the instructions of assessment in KL 06 now is stronger than two years ago. The result of this study indicates that the influence of Reform 94 is weaker today, and stronger towards the instructions of assessment in KL 06, compared to Vinje (2008) and Jonskås (2009).
These results corresponds with previous research, in that it takes time to implement a new reform (Black and William, 2006: Jonskås, 2009; Engh, 2006; Næss, 1996 and Dale, 2007).

Theory emphasised that we need active students who believe that their effort have an impact on their achievements (Black and William, 2006). As long as students believe that effort can not make much difference because of their lack of ability, effort to enhance their capability as learners will have little effect (Black and William in Gardner (ed.), 2006). Suskie (2001) emphasised the teachers engagement and encouragement towards the students. Is this easy to do, and at the same time tell them that you can not consider effort in physical education? On the other side, is it possible to assess effort objectively and fair?

I believe, based on previous research, theory, the results in this study and my own physical education teaching experience that the subject physical education needs effort, or a substitute for the criteria in physical education. By (2010) has developed some replacements for the criteria effort and that might be a great start for this development in the future. Her suggestion of the replacements was the ability to do activities over and over again, keep up with hard physical activity for as long as possible, be positive towards fellow students and make them look good, show engagement and social commitment, and pass and be in a position to receive a pass.

The significant differences between Vestfold and Telemark in the use of skill and effort as a criteria enhances this indication. To be able to interpret the result of the assessment thoroughly it is necessary with a common understanding on which criteria one shall assess and the standards of the assessment (Suskie, 2001).

**Taking individual premises into account in the assessment**

This study shows that 89% of physical education teachers take individual premises into account when they assess students, and 65% believed it was wrong not to take individual premises into account when assessing.

Previous research in lower secondary school has also shown that 73% of physical education teachers had a wish to take individual premises into account when they assesses, but they also
wanted a definition of what kind of premises that should account and the weighting of these (Vinje, 2008).

The Dept of education stated already in 2005 that no individual premises should be taken into account when assessing students in upper secondary school. When new edited assessment instructions came in September 2009 the instructions regarding this did not change for any subjects (UFD, 2009).

Black and William (2006) were in favour of the learning oriented assessment compared to the goaloriented assessment we find in KL 06. They emphasised this assessment orientation backed by a belief that all students can achieve independent on their individual premises (Black and William, 2006). By (2010) states that you can not assess the competence goals long before the end of the school year. You have to assess the students total achievement of all the competence goals by the end of the school year to fulfil the instructions (UFD, 2009).

It is important to give confidence in students ability. The teachers engagement and encouragement reflects upon the students, so they become engaged and encouraged. (Suskie, 2001). It is vital to create a culture with the belief of success by trying and training (Black and William, 2006).

When a student is told that the physical education teacher can not take his asthma problems into account when she assess him, he will probably not be engaged and encouraged. The possibility of him being absent or unmotivated in the subject is then more likely. My experience is that absence and/or no participation in the gym is one of the major challenges, and a huge problem, of today in physical education.

Is it fair to (not) take individual premises into account when assessing students? This is difficult, considering the above theories, previous research and the results of this study. I have come to believe that we today have the best instructions regarding this. If teachers can be, in a higher degree than today, aware of the instructions regarding adaptive education and the individual premises I believe it can be fairer and more transparent in the future. Although, the significant difference between the counties indicates that the instructions must then be much more clear on this.
One can also ask how it is possible to adapt the education towards each student when you have 350 students in physical education every week? It is not difficult to understand the good intentions of theory and KL 06, but previous research and this study shows how difficult it is to practice these intentions and instructions.

**Formative assessment**

This study showed that 55% try to give the students formative assessments, but are uncertain of their success in this project. 20% did not have enough time to do this and 12% believed that formative assessment were too difficult and were not able to do this. Only 4% believed that they manage formative assessment and 9% to a certain extent.

The mean of lessons teachers have secondary goals/criteria indicated to be just above 50%, while the mean of lessons teachers have secondary goals/criteria, and the students were aware of these goals, indicated to be just below 50%. This indicates that in half of all physical education lessons teachers did not have secondary goals or criteria, and the students were not aware of the goals in those lessons. On the other hand, in half of the lessons teachers and students worked towards secondary goals/criteria.

The research from Oslo in 2008 showed that 65% of physical education teachers in upper secondary schools had not enough time to give formative assessment or it was too difficult to give students this guidance towards the competence goals. In lower secondary school 37% believed the same (Vinje, 2008).

Jonskås (2009) revealed that her informants interpreted and practiced formative assessment in a pretty similar way, but there were differences among her informants when it came to how they interpreted and practiced summative assessment. Some teachers assessed their students on the way and gave a summative assessment, while other teachers did all activities all over again in the spring and then assessed the students again (Jonskås, 2009).
Formative assessment is important to enhance every student's learning. The interaction between the teacher and the student, with feedback, is crucial. The teacher must know each student very well. Teachers have to give students time to train (Black and William, 2006).

Suskie (2001) stated that the teaching should match the assessment and vice versa and that it is important to help the student to learn the activities they are being assessed on.

Both theories mentioned above emphasised formative assessment. Also KL 06 enhance guidance towards the competence goals. In KL 06 formative assessment is mandatory, and it has to be documented that formative assessment had been given (UFD, 2009).

The intentions of KL 06 and theories mentioned above is, of course, very good. In practice I experience that it is almost impossible to fulfil these intentions. Based on the results in this research, previous research, my own and colleagues experience it is very difficult or maybe impossible to obtain these instructions. With up to 350 students every week the teacher has 2 minutes attention in average towards each student. If you then subtract the time the teacher needs to teach, organise and lead the whole group, this average drops dramatically.

For a full time physical education teacher (in VG1) you have to do at least 11 200 assessments each school year with 350 students. This will give you an average of 295 documented assessments each week as a minimum. Then it is important to ask if physical education should be a subject which mainly emphasises assessment and not the joy of physical activity? I believe that it does not have to be either or nor, but both. It is difficult, but most possible to enjoy physical activity through assessment for learning. If teachers can use formative assessment, previous research has shown, we will have an increased students achievements in physical education, and hopefully their joy of the subject. Nevertheless, I believe the amount of and the demand for assessment in KL 06 is too difficult to fulfil.

What is needed to improve formative assessment in practice? Enough research has been carried out to state the advantages of formative assessment (Black and William, 2006). Today we experience a gap between theory and practice. It is the responsibility of governments to take the lead. Changes that are put into direct effect by teachers and students in
classrooms/gym will give results. I believe it is essential that national policymakers will grasp the opportunity and take the lead in this direction (Black and William, 2006).

In practice this means fewer students or more teachers, in each class. A third option is more physical education lessons. If not at least one of these options will change in the future I am afraid that we will never maximise the potential of each student.

**Summary**

The results in this study indicated that relations between the instructions of assessment in KL 06 and the assessment practice among physical education teachers in Vestfold and Telemark could be described as weak. This relation was weak because the teachers assessment practice have a wide range of uses and was both split and/or divided, and also considering that KL 06 has now been in practice for five years. There were many factors that could explain the reasons for this weak relation. Although, there is stronger relations in these results when you compare it with previous research.

85% of the physical education teachers who responded used effort as assessment criteria. The mean was 24.44%, and this was approximately the same average as the criteria knowledge.

The use of bringing individual premises into account when they assessed were something 89% of the respondents did, despite that the instructions of assessment rejects this practice. The respect and the relations towards the instructions regarding individual premises can be described as weak.

The teachers try to give students guidance towards the competence goals, but 55% were uncertain of their success in this project. 20% did not have enough time to do this and 12% believed it was too difficult. Only 4% believed that they manage formative assessment. Theory and KL 06 emphasises formative assessment, but also previous research indicated that it was difficult to fulfil the instructions on formative assessment.

**7.2 Secondary research questions**

Are the instructions of assessment well-known to the physical education teachers?

94% of the respondents expressed that they were known to the instructions of assessment. Although they were known to the instructions, 45% of the physical education teachers wished
they had more knowledge of these instructions, and 22% who were known to the instructions believed that the instructions were not clear enough. 26% states that they were well known to these instructions and 6% said that they did not know the instructions well enough.

When more than 9 out of 10 expressed that they were known to the instructions of assessment, this could indicate that physical teachers in Vestfold and Telemark have a general competence of the instructions of assessment. It was, although, just one out of four that stated that they knew these instructions very well. Almost half of the respondents wished that they knew more.

Vinje (2008) showed that teachers in general did not have, either received, understood or implemented action regarding the instructions from the Dept of education. The results of Jonskås (2009) showed that there had been few courses offered to teachers regarding the implementation of KL 06.

If teachers are satisfied with the old curricula and do not have faith in the new reform, changes was not likely. Teachers who have worked with and implemented a new reform, and new instructions, will naturally have a different assessment practice than teachers who have not done this work (Dalin, 1994). We can find the same results, also mentioned above, by Engh, Dobson and Høihilder (2008).

Bomo (2008) showed in his study that implementation will take time, but teachers were overall very positive towards the new reform, KL 06. He concluded that when time is up and the vaguenesses was cleared out, physical education will become a subject functional with the new KL 06.

Black and William (2006) and Suskie (2001) both emphasised that teachers needs time to work with assessment in general, and specially assessment criteria.

This study shows that physical education teachers are in general known to the instructions. Although they are known to the instructions, they choose not to follow them slavish. According to theory and previous research the reasons for this could be the lack of time to work with KL 06, resistance or the lack of courses offered.

Every teacher must consider many factors when he assesses and that may also be an explanation of this (see model on page 30). Despite that the instructions of assessment are
known to the physical education teachers, there seems to be a lack of loyalty or ability towards them in practice.

**Summary**

The instructions of assessment were known to the physical education teachers, but only 26% stated that they knew them very well. Half of the physical education teachers expressed that they wanted more knowledge of the instructions of assessment. Previous research and theory have showed that there were various factors that can lead to a weak implementation of a new reform. The lack of courses offered, not having faith in the new reform, the time spent working with the new reform and the ability to influence the new reform can all be important factors. Today there seems to be, despite that the instructions of assessment is known to the physical education teachers, a lack of loyalty or ability towards them in practice.

To what degree do the physical education teachers believe that the instructions of assessment give a good basis for assessment practice in physical education in upper secondary school?

This study shows that 57% of the respondents do not believe that the current instructions of assessment gives a good basis for assessment practice in physical education in upper secondary school, 23% believes that it does and 20% were uncertain or did not know. The mean showed that the respondents were between the answer options uncertain and partially disagree that the current instructions gives a good basis for assessment practice in physical education.

When asked the same question, but now with the possibility of local adaptions, the mean was closer towards the answer option uncertain than the mean last stated. More detailed, with local adaptions, 39% of physical education teachers still believe that the instructions do not give a good basis for assessment practice, but now 35% believes that it does. With local adaptions there was a split opinion among physical education teachers whether the instructions of assessment gives a good basis for assessment practice.

The physical education teachers were in average partially disagree that it is easier to assess today than during Reform 94. 57% stated that it was easier to assess under Reform 94 than in KL 06. Only 11% states that it was easier today than during Reform 94. 32% was uncertain or did not know whether it was easier or not assessing in KL 06 than in Reform 94. The high
degree of respondents who are uncertain or do not know can be explained by less experienced teachers who did not work during Reform 94.

These results indicates some disagreements and resistance towards the instructions of assessment in KL 06. This study cannot reveal the reasons for this, but previous research shows that when teachers have no or little influence on the developing of a new reform the new government curricula are never executed slavish. Also if teachers are not agree with what was written in the new curricula the teachers practice will differ from the intention of the new reform (Engh, Dobson and Høihilder, 2008). Nevertheless, when teachers have the opportunity of local adapptions the results here indicates that there is a split decision whether the instructions of assessment provides a good basis for assessment.

**Summary**

The major part of physical education teachers believed that the instructions of assessment in KL 06 did not give a good basis for assessment practice. With local adaptions, there was a split decision, but over half of the physical education teachers stated that assessment was easier during the last reform then today.

What kind of criteria do P.E. teachers use when they give the grade 1 (failure/stryk)?

The mean showed that the respondents were partially agree that a high degree of participation will at least give the grade 2, but the average also stated that it is not enough to participate in one lesson to have the grade 1. More detailed, 74% of the respondents says that a high degree of participation will at least give the grade 2 (pass) in physical education. Further on, 84% states that participation in one session was not enough to have the grade 1.

The teachers had a split decision whether a student who had participated in at least half of the lessons and had been assessed to a minimum of grade 2 in half of the curriculum goals will have the grade 2 or better. 44% would have given the student the grade 2 or better while 33% disagreed with that. 21% were uncertain or did not know what to answer. The mean also showed that the respondents where uncertain about this.
These results can indicate that participation in physical education in upper secondary school is one of the criteria for grade 1 (failure/stryk). This study do not explore other possible criteria physical education teachers may use when they assess.

The instructions of assessment in KL 06 tells us to use the criteria skill, and grade 1 was described in the instructions as; "express a very low competence in the subject".

Previous research has showed that physical education teachers believes there is a lack of standardisation and minimum requirements from the Dept of education (Vinje, 2008; Jonskås, 2009).

What is a very low competence in physical education? If every school or every teacher shall develop their own standardisation and minimum requirements there will probably be a large differences among physical education teachers, since "a very low competence” can have many perceptions and opinions.

KL 06 and By (2010) requests every school to do this job, instead of Dept of education. They emphasises that each school has its own framework conditions and therefore must develop this standardisation in each local school. KL 06 also want to give more freedom to the teacher in the assessment and make it easier to assess than earlier reforms. (UFD, 2005; By, 2010; Jonskås, 2009).

Suskie (2001) emphasises in her step number six that teachers should base their assessment on a standard.

A national standardisation and minimum requirements would have been an important contribution to the subject and the students. The assessment would then have, more likely, reflected justice and be more transparent towards other comparable students, but the Dept of education has chosen freedom and simplicity for the teachers instead. I believe this is not fair towards the students. The consequence can be that students are being assessed dependent on their physical education teacher and not general requirements and criteria.
Summary

The results indicated that participation was one of the criteria when physical education teachers gave the grade 1. There was a split decision of the degree of participation to have the grade 1. These results must be considered carefully, because the research did not examined other possible criteria for the grade 1.

How many lessons do physical education teachers need to have enough assessment foundation to be able to give a grade to a student in upper secondary school?

The mean was 20.41 lessons among the teachers who could pinpoint the lessons they needed.

20 lessons, or less, are what 43% of physical education teachers in upper secondary schools in Vestfold and Telemark needed to have a scientific basis to give a grade (1-6) to a student in physical education. 4 out of 10 could not pinpoint the lessons they needed to have enough foundation for assessment. Only 11% needed 40 lessons, and no one needed 60 lessons.

20 lessons are approximately 1/4 of all lessons. This means that a student who participates in one lesson, then skip three lessons, participate in one lesson, then skip three lessons again, and so on, will get a grade from almost half of the respondents in this research. In practice this indicates that a student with 73% absence/not participated will have a grade. You can argue that it is not possible to do such mathematics because it depends on which lessons the student was (not) participating. That was, probably, why 40% could not pinpoint the lessons they needs.

According to KL 06 and the instructions of assessment students have the right to be assessed (to have a grade) and this right still stands even when it is difficult to attain the foundation for assessment. Although, if the student has a large amount of absence, lack of participation in assessment situations or other particularly reason it can lead to "not able to assess" (IV) (UFD, 2009). There are no boundaries in the instructions in what degree this absence of participation should be before the teacher set a grade or "not able to assess" (IV) (UFD, 2009).
When we also take into account that 40% of the respondents could not pinpoint the lessons they needed to have enough assessment foundation to give a grade this strongly indicate that there was a very different assessment practice among physical education teachers in Vestfold and Telemark. I believe it is most worrying that participation is not more emphasized in the instructions of assessment and in the assessment practice.

It can also be argued that education not only should increase students skills and knowledge, but also prepare the students for a working life. A working life where being present and participation is an important element.

The need of standardisation and minimum requirements seems to be an valuable contribution if assessment in physical education wants to reflect justice and be transparent in the future.

**Summary**

20.41 lessons are the mean of what physical education teachers needs to obtain enough assessment foundation to set a grade. 43% of physical education teachers in upper secondary schools in Vestfold and Telemark needs student participation in one out of four lessons or less of their total lessons to have a foundation for assessment. 40% could not pinpoint the lessons they needed. In KL 06 there are no participation requirements. It all depends on the individual teacher's needs and requirements.

**Is there a difference in the assessment practice between Vestfold and Telemark in physical education?**

The significant differences (p<.05) in the assessment practice in physical education between Vestfold and Telemark was the use of the criteria skill and effort, the individual premises they take into account, the amount of lessons teachers have secondary goals defined and the participation needed to least set the grade 1 in physical education.

The mean of weighting skill in Telemark was 47% and 55% in Vestfold, while the mean of effort in Telemark was 28%, it was 21% in Vestfold. The mean weighting of knowledge was almost the same in the two counties.
77% of the respondents from Vestfold take no or little individual premises into account when they assess students, while 49% of the respondents from Telemark do the same. Over half of the physical education teachers in Telemark take individual premises into account in a high degree when they assess, while 23% in Vestfold do the same. All of the participants from Vestfold expressed that it was not enough to participate in one lesson throughout the school year to have the grade 1. 77% from Telemark stated the same.

These differences could indicate that the relation between the instructions of assessment and the assessment practice was stronger in Vestfold than in Telemark. This claim is strengthen when it comes to the opinions of the instructions of assessment. Both counties express that they are known to the instructions of assessment, but Vestfold believes in a higher degree that the instructions of assessment, also with local adoptions, gives a good basis for assessment in physical education.

If we look at lessons teachers have secondary goals that the students shall work with we find that 41% in Telemark and 65% in Vestfold do this in over half of their lessons. When the students have to be aware of the secondary goals/criteria there was 44% in Telemark and 52% in Vestfold who responded that they did this in over half of the lessons.

All of this gives some indications of the differences in the assessment practice between Vestfold and Telemark in physical education. These results can contribute to important information to the Dept of education, the government in each County and towards the local schools in the respectively County. It is easier to know in what direction you should go if you know where you are.

**Summary**

There were some significant (p<.05) differences between Vestfold and Telemark in their assessment practice in physical education in upper secondary schools. The significant differences (p<.05) were the use of the criteria skill and effort, the individual premises they take into account, the amount of lessons teachers have secondary goals defined and the participation needed to least set the grade 1 in physical education.
These results could indicate that Vestfold has a stronger relation to the instructions of assessment than Telemark in the assessment practice and that Vestfold needs more participation than Telemark to have enough assessment foundation to give a student grade 1 in physical education.
8.0 Conclusion

This presented study has shown that the relations between the instructions of assessment in KL 06 and the assessment practice among physical education teachers in Vestfold and Telemark can be described as weak. The reasons for this indication were because the teachers assessment practice had a wide range of use. The assessment practice in general indicated to be both split and/or divided. In addition, also considering that KL 06 has now been in practice for five years. There are many factors that may explain the reasons for this weak relation. However, this study presents results which indicate to have a stronger relation to the instructions of assessment than results of previous research.

The mean of using effort, skill and knowledge in the weighting of criteria were respectively 51%, 25% and 24%. The use of effort as a criteria and the use of taking individual premises into account in the assessment was still common among physical education teachers, despite that the instructions of assessment rejects this practice.

The mean of lessons teachers have secondary goals/criteria, and the students were aware of these goals, indicated to be just below 50%. This indicates that in over half of all physical education lessons teachers did not have secondary goals or criteria, and the students were not aware of the goals in those lessons. On the other hand, in almost half of the lessons teachers and students worked towards secondary goals or criteria.

This study shows that the major part of physical education teachers do not manage, according to the instructions, to give students formative assessment.

Physical education teachers in Vestfold and Telemark were known to the instructions of assessment in KL 06, but only one out of four says that they know them very well. Half of the physical education teachers expressed that they wanted more knowledge of the instructions of assessment in KL 06.

The major part of physical education teachers believed that the instructions of assessment do not give a good basis for assessment practice. With the possibility of local adaptions there were a split opinion, but over half of the physical education teachers stated that assessment
was easier during the last reform, Reform 94, than today. Only 11% meant it was the other way around.

Further on, the study indicated that participation was one of the criteria when physical education teachers give the grade 1. There was a split decision about the degree of participation a student needs to have to obtain enough assessment foundation for the grade 1. These results must be considered carefully, because the research did not examined other possible criteria.

This study shows that physical education teachers, who could pinpoint, needs 20.41 lessons in average to have enough assessment foundation to set a grade. 43% of physical education teachers in upper secondary schools in Vestfold and Telemark needed student participation in one out of four lessons or less of their total lessons to have a foundation for assessment. 40% could not pinpoint the lessons they needed. In KL 06 there are no participation requirements. It all depends on the teachers' individual needs and requirements.

Finally, this study presents some differences between Vestfold and Telemark in their assessment practice in physical education. The significant (p<.05) differences were the use of the criteria effort and skill, the amount of lessons teachers have secondary and/or criteria goals defined, the use of taking individual premises into account in the assessment, and the need for participation to obtain enough assessment foundation to set the grade 1.

This study indicated that Vestfold had a stronger relation to the instructions of assessment in the assessment practice than Telemark, and that Telemark needs less participation than Vestfold to obtain enough assessment foundation to set the grade 1.

This study presents the results of a subject which is in need of minimum and standardised requirements. Teachers' freedom and easy assessment instructions are in favour of the students' right to an assessment practice that reflects justice and is transparent to other comparable students. This study also presents results which shows that physical education teachers do not manage, according to the instructions, to give the students formative assessment towards the competence goals in the subject. The results in this study also supports previous research. Both Vinje (2008) and Jonskás (2009) showed that teachers are in need of a minimum and
standardised requirements, and that the use of effort as a criteria in the assessment was still common among physical education teachers.

These results are useful, not only for each County and the physical education teachers working in those counties, but also for the Dept of education and everyone who are involved or interested in assessment in physical education in upper secondary schools.

The weaknesses of this study

The presented quantitative study shows good face validity and reability. Although, it is possible to discuss whether the physical education teachers respond according to their own assessment practice and opinions or they respond according to what is expected of them. Some of the same research as this one is done before with some of the same indicated results (Vinje, 2008). Also other previous research has shown some of the same results (Jonskås, 2009).

This study could had, or should had, examined self assessment which also is a part of KL 06 and the instructions of assessment. The results of this study also indicates that it would have been more relevant to explore experienced vs inexperienced physical education teachers instead of their education in the subject. In addition, this study is in lack of other possible criteria than participation for the grade 1.

A qualitative study in addition to this quantitative study would also have given increased validity.

Being a physical education teacher myself can influence the collecting, processing and/or the presentation of the data. Nevertheless, I have tried to be as objective as possible in the whole process, and did not participate when any of the respondents filled out the questionnaire. In addition to this, I have enclosed all relevant data in this thesis and presented it as objectively and truthfully as to my understanding.

The collections and analyses of this data material is done in Norwegian while the thesis is written mainly in English. This translation can lead to some linguistic challenges which can influence the understanding of the results. However, I have done what I could to prevent this
by presenting important parts in both languages. A teacher, in both English and physical education, has also been language vetted this thesis to prevent this.

**Future research**

To verify and explore the results of this study there is a need for more research. First of all, in other parts of the country, in second-hand; it could also be very useful to look at self assessment, experienced vs inexperienced physical education teachers, and finally, but not least, qualitative studies which could explore these results in a higher degree.

I believe it also would be very useful to examine if physical education could become a subject with an oral and practical exam for students in upper secondary schools. When the teacher and students know that there is a possibility for an external examiner visiting at the end of the school year, it could force them to work harder towards the competence goals and according to the instructions of assessment in KL 06.

With the results of this study it would have been interesting to examine what other criteria physical education teachers are using when they set the grade 1 and how many of the total students who gets this grade. I believe there are few students with the grade 1 in physical education and also many students with "not able to assess". I believe this needs to be explored in future research.

It would also been most interesting to explore students opinions of the practising assessment in physical education, and specially regarding effort and individual premises which teachers today cannot take into account when they assess.

According to the general need for more research, there is also a need for more research for a longer period over time, longitudinally studies. This could give more explicit information about the relation between the instructions of assessment and the assessment practice in physical education.
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Appendix
Appendix 1: The letter to each school in Vestfold and Telemark (in Norwegian)

Færder videregående skole
Avd. Slottsfjellet v/ Bent Mørken
Postboks 43
3101 Tønsberg

Videregående skoler i Vestfold og Telemark.

Følgebrev til Master undersøkelsen om vurdering i kroppsøving

Til kroppsøvingsansvarlig

Denne undersøkelsen distribueres til alle skoler i Vestfold og Telemark. Meningen med undersøkelsen er å finne ut hvilken praksis som følges i forhold til vurdering i kroppsøvingsfaget relatert til forskriftene. Resultatene kommer til å bli offentliggjort i forhold til:

- Kroppsøvingslærere som samlet gruppe
- Kroppsøvingslærere i forhold til kjønn
- Kroppsøvingslærere i forhold til vg-trinn og fylke

De innsamlede dataene kommer altså ikke til å gi resultater i forhold til hver enkelt skole.

Jeg ber med dette om din hjelp til å distribuere undersøkelsen ut til de andre kroppsøvingslærerne på din skole, samle inn skjemaene og sende disse i retur til Færder videregående skole.

Undersøkelsen er altså spesifikk i forhold til kroppsøvingsfaget. Lærere som ikke underviser i kroppsøving, men for eksempel i aktivitetslære på idrettsfaglig studieretning, skal derfor ikke svare.


Tusen takk for hjelpen!

Med vennlig hilsen

Bent Mørken
Appendix 2: The letter to each school in Vestfold and Telemark (in English)

Færder high school
Dep. Slottsfjellet v / Bent Mørken
PO Box 43
3101 Tønsberg Tønsberg, 15/10-09

Upper secondary schools in Vestfold and Telemark.

Following letter to a Master survey of assessment in physical education
Attn: Responsible for Physical Education

This survey is distributed to all upper secondary schools in Vestfold and Telemark. The intention of this study is to determine what practices are followed in relation to assessment in physical education related to the instructions. The results will only be published in relation to:
- Physical education teachers as a gathered group
- Physical education teachers in relation to gender
- Physical education teachers in relation to the vg-step and county

The collected data will therefore not give results in relation to each school.

I ask for your help to distribute the survey to the other physical education teachers in your school, collect the forms and send them in return to Færder upper secondary school.

The survey is specific in relation to the physical education profession. Teachers who teach for example in learning activities like sports academic study, shall therefore not respond.

Addressed and stamped reply envelopes are enclosed. If it is a need for multiple forms, I request that these are copied out by the individual school. I would be grateful if the forms would be returned as soon as they are completed, but no later than December 3, 2009. All schools that respond and submit by the deadline will receive the results of the survey.
Thank you for your help!

Best regards

Bent Mørken
Appendix 3: The questionnaire (in Norwegian)

Spørreundersøkelse om vurdering i kroppsøving på videregående skoler i Vestfold og Telemark.


På forhånd takk for hjelpen!

Bent Mørken

<table>
<thead>
<tr>
<th>I hvilket fylke arbeider du?</th>
<th>Vestfold</th>
<th>Telemark</th>
</tr>
</thead>
<tbody>
<tr>
<td>På hvilket(t) trinn arbeider du i kroppsøving?</td>
<td>VG 1</td>
<td>VG2</td>
</tr>
<tr>
<td>Kjønn?</td>
<td>Kvinne</td>
<td>Mann</td>
</tr>
<tr>
<td>Utdanning:</td>
<td>Fagutdannet</td>
<td>Adjunkt</td>
</tr>
</tbody>
</table>

1) Grunnlaget for karakter i kroppsøving er de samla kompetansemåla i faget. Hvis du skulle bryte ned dette grunnlaget i kriteriene ferdighet, kunnskap og innsats: Hvordan ville du anslå at du vektla de tre kriteriene i %?

| Ferdighet | ..........% |
| Innsats | ..........% |
| Kunnskap | ..........% |
2) Anslå prosentmessig hvor mange av timene dine du har klare delmål (f. eks.: Utføre fingerslag i volleyball teknisk riktig) for elevens læring:

<table>
<thead>
<tr>
<th>0 - 25%</th>
<th>25 - 50%</th>
<th>50 - 75%</th>
<th>75 - 100%</th>
</tr>
</thead>
</table>

3) Anslå prosentmessig hvor mange av timene dine elever er klar over hvilke konkrete delmål de skal jobbe mot:

<table>
<thead>
<tr>
<th>0 - 25%</th>
<th>25 - 50%</th>
<th>50 - 75%</th>
<th>75 - 100%</th>
</tr>
</thead>
</table>

4) Paragraf 3-3 i forskrift til opplæringslova sier at vi i videregående opplæring **ikke skal la elevens forutsetninger telle i grunnlaget for vurdering (fedme, astma, skader, o.l.).**

I hvilken grad tar du hensyn til individuelle forutsetninger ved vurdering i kroppsøving?

<table>
<thead>
<tr>
<th>Ingen grad</th>
<th>Liten grad</th>
<th>Stor grad</th>
<th>Vet ikke</th>
</tr>
</thead>
</table>

Dersom du svarte "Liten grad" eller "Stor grad" i foregående spørsmål, vennligst svar på følgende spørsmål: Hvilke individuelle forutsetninger tar du hensyn til i vurderingen av eleven i kroppsøving? (Sett eventuelt flere kryss)

- Fedme
- Motivationsproblemer
- Mobbing
- Vanskelige hjemmeforhold
- Allergier
- Dysleksi
- Skader
- Fysiske handikap
- Astma
- Angst
- Religiøs overbevisning som begrenser aktivitet

Annet: ........................................................................................................................................

5) Paragraf 3-3 i forskrift til opplæringslova sier som nevnt at vi i videregående opplæring **ikke skal la elevens forutsetninger telle i grunnlaget for vurdering (fedme, astma, skader, o.l.)** Hva mener du om dette? Kryss av for den påstanden som passer best

- Det er helt riktig
- Det er feil. Vi må ta hensyn til individuelle forutsetninger i dette faget
- Vet ikke
- Annet: ........................................................................................................................................
6) Føler du at du klarer å gi elevene veiledning på hvordan de ligger an i forhold til måloppnåelse innefor de ulike kompetansemålene i kroppsøving? Kryss av for den påstanden som passer best:
- Nei, dette har jeg ikke tid til. Kriteriene blir for mange og kroppsøvingsfaget har for få timer til at jeg kan bruke så mye tid på vurdering.
- Nei, jeg synes det er for vanskelig å lage tydelige og målbarer kriterier innefor hvert enkelt kompetansemål.
- Jeg forsøker å oppnå dette, men er usikker på om jeg kan si at jeg lykkes med det.
- Ja, dette føler jeg at jeg klarer
- Ja. Dette føler jeg at jeg klarer til en viss grad.

7) Kjenner du til forskriftene for vurdering?
- Ja, meget godt.
- Ja, men skulle gjerne kunnet mer.
- Ja, men synes forskriftene er uklare.
- Nei, ikke godt nok.
- Nei

8) Ta stilling til følgende påstander:

Påstand 1: En elev som deltar i kroppsøving i 80% av timene vil alltid få karakteren 2 eller bedre

<table>
<thead>
<tr>
<th>Helt enig</th>
<th>Delvis enig</th>
<th>Usikker</th>
<th>Delvis uenig</th>
<th>Helt uenig</th>
<th>Vet ikke</th>
</tr>
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</tbody>
</table>

Påstand 2: En elev som har høy grad av ferdigheter på alle kompetansemålene, men som viser svak innsats og holdninng vil aldri få bedre enn karakteren 4

<table>
<thead>
<tr>
<th>Helt enig</th>
<th>Delvis enig</th>
<th>Usikker</th>
<th>Delvis uenig</th>
<th>Helt uenig</th>
<th>Vet ikke</th>
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</tbody>
</table>

Påstand 3: Dersom en elev har deltatt minimum en økt gjennom skoleåret skal eleven minst ha karakteren 1

<table>
<thead>
<tr>
<th>Helt enig</th>
<th>Delvis enig</th>
<th>Usikker</th>
<th>Delvis uenig</th>
<th>Helt uenig</th>
<th>Vet ikke</th>
</tr>
</thead>
<tbody>
<tr>
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<td></td>
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</tbody>
</table>
**Påstand 4:** Hvis en elev har deltatt i minst halvparten av undervisningen og jeg har vurdert eleven til minimum karakteren 2 innenfor halvparten av læreplanmålene vil eleven få karakteren 2 eller bedre.

<table>
<thead>
<tr>
<th>Helt enig</th>
<th>Delvis enig</th>
<th>Usikker</th>
<th>Delvis uenig</th>
<th>Helt uenig</th>
<th>Vet ikke</th>
</tr>
</thead>
</table>

**Påstand 5:** Dagens forskrifter gir et godt grunnlag for vurdering

<table>
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<tr>
<th>Helt enig</th>
<th>Delvis enig</th>
<th>Usikker</th>
<th>Delvis uenig</th>
<th>Helt uenig</th>
<th>Vet ikke</th>
</tr>
</thead>
</table>

**Påstand 6:** Dagens forskrifter med lokal tilpasning gir et godt grunnlag for vurdering

<table>
<thead>
<tr>
<th>Helt enig</th>
<th>Delvis enig</th>
<th>Usikker</th>
<th>Delvis uenig</th>
<th>Helt uenig</th>
<th>Vet ikke</th>
</tr>
</thead>
</table>

**Påstand 7:** Vurdering er enklere i kroppsøving i dag enn det var under Reform 94

<table>
<thead>
<tr>
<th>Helt enig</th>
<th>Delvis enig</th>
<th>Usikker</th>
<th>Delvis uenig</th>
<th>Helt uenig</th>
<th>Vet ikke</th>
</tr>
</thead>
</table>

### 9) Anslå hvor mange undervisningstimer du må observere en elev for å ha faglig grunnlag til å kunne gi karakter til vedkommende i kroppsøving:

- 2 undervisningstimer
- 4 undervisningstimer
- 10 undervisningstimer
- 20 undervisningstimer
- 40 undervisningstimer
- 60 undervisningstimer
- Kan ikke tidfestes
- Vet ikke

**Takk for hjelpen!**

Retur senest 3/12-09 til kroppsøvingsansvarlig ved din skole (eller Færder VGS, Avd. Slottsjetlet v/ Bent Mørken, Postboks 43, 3101 Tønsberg)
Appendix 4: The questionnaire (in English)

A research regarding assessment in physical education in high schools in Vestfold and Telemark.

This research is a part of my master thesis at The University of Telemark. This questionnaire is distributed to all teachers in the subject physical education in Vestfold and Telemark. The publication of the results will be on gender of teacher, county and school year. Every answer is, of course, anonymous. A high response rate will give the results better value. I truly hope you will help and respond to this research, and that we together can contribute to develop knowledge regarding assessment practice in physical education. Every schools which respond and send the questionnaire back within the deadline, third of December, will get the results of this research.

Thank you for your participation!

Bent Mørken

<table>
<thead>
<tr>
<th>In which county do you work?</th>
<th>Vestfold</th>
<th>Telemark</th>
</tr>
</thead>
<tbody>
<tr>
<td>What step do you work in physical education?</td>
<td>VG 1</td>
<td>VG2</td>
</tr>
<tr>
<td>Gender?</td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>Education:</td>
<td>P.E. educ.</td>
<td>Schoolmaster</td>
</tr>
<tr>
<td></td>
<td>Sixth form</td>
<td>unskilled</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>...............................</td>
</tr>
</tbody>
</table>

1) The foundation of grades in physical education are the total competence objects in the subject. If you could split up this foundation in the criteria skill, knowledge of theory and effort: what will you presume your digits are in %:

   Skill ............%  

   Effort ............%  

   Knowledge ............%  

2) Roughly indicate how much of your lessons you have stated secondary goals (eg.: Perform finger stroke in volleyball technically correct) for the students and their learning?

   - 0 - 25%  
   - 25 - 50%  
   - 50 - 75%  
   - 75 - 100%
3) Roughly indicate how many of your lessons your students is aware of which secondary goals they work on:

- [ ] 0 - 25%
- [ ] 25 - 50%
- [ ] 50 - 75%
- [ ] 75 - 100%

4) Paragraph 3.3 of the Regulation to the Education Act says that in secondary schools should not let students' premises count of the basis of assessment (obesity, asthma, injuries, etc.). In what extent do you take into account the individual premises of assessment in physical education?

- [ ] No extent
- [ ] Small extent
- [ ] Large extent
- [ ] Do not know

If you answered "small" or "large extent" in the previous question, please answer the following questions: Which individual premises do you take into account in the assessment of the student in physical education? (Insert any additional box)

- [ ] Obesity
- [ ] Motivation Issues
- [ ] Bullying
- [ ] Difficult home conditions
- [ ] Allergies
- [ ] Dyslexia
- [ ] Injuries
- [ ] Physical disability
- [ ] Asthma
- [ ] Anxiety
- [ ] Religious conviction that limits activity

Other: ........................................................................................................................................

5) Paragraph 3.3 of the Regulation to the Education Act says that in upper secondary schools should not let students' premises count of the basis of assessment (obesity, asthma, injuries, etc.) What do you think about this?

- [ ] It is entirely appropriate
- [ ] It is wrong. We must take into account the individual requirements in this subject
- [ ] Do not know

Other: ........................................................................................................................................

Page | 98
6) Do you feel that you are able to give students guidance on how they are in relation to the achievement of objectives within the various competence goals in physical education?

Check the statement that best suits you:
- No, I do not have time to. The criteria are too many and physical education profession has too few hours to spend on assessment.
- No, I think it is too difficult to create clear and measurable criteria within each competence goal.
- I try to achieve this, but are not sure whether I can say I succeed with it.
- Yes, this I feel that I can
- Yes. This, I feel that I can do to a certain extent.

7) Do you know the Instructions of assessment?

- Yes, very well.
- Yes, but would have loved to been able to know more.
- Yes, but think the instructions are unclear.
- No, not well enough.
- No

8) Ask yourself the following assertions:

**Claim 1:** A student who participates in physical education in 80% of the hours will always get the grade 2 or better

Totally agree Partially agree Uncertain Partially Disagree Strongly disagree Do not know

**Claim 2:** A student who has a high degree of skill for all competency objectives, but which shows a weak effort and attitude will never get better than grade 4

Totally agree Partially agree Uncertain Partially Disagree Strongly disagree Do not know

**Claim 3:** If a student has participated at least one session throughout the school year the student will at least have the grade 1

Totally agree Partially agree Uncertain Partially Disagree Strongly disagree Do not know
Claim 4: If a student has participated in at least half of the teaching and I have assessed the student to a minimum of grade 2 in half of curriculum goals, students will have grade 2 or better.

Totally agree  Partially agree  Uncertain  Partially Disagree  Strongly disagree  Do not know

Claim 5: The current Instructions provide a sound basis for assessment

Totally agree  Partially agree  Uncertain  Partially Disagree  Strongly disagree  Do not know

Claim 6: The current Instructions with local adaptation provides a good basis for assessment

Totally agree  Partially agree  Uncertain  Partially Disagree  Strongly disagree  Do not know

Claim 7: Assessment of physical education is easier today than it was under Reform 94

Totally agree  Partially agree  Uncertain  Partially Disagree  Strongly disagree  Do not know

9) Estimate how many lessons you need to observe a student to have a scientific basis to give a grade to the person in physical education:

2 lessons  4 lessons  10 lessons  20 lessons

40 lessons  60 lessons  cannot pinpoint that  Do not know

Thanks for your help!  Return no later than 3/12-09 to Physical Education Officer at your school (or Færder VGS, Dep. Slottsfiellet v / Bent Mørken, PO Box 43, 3101 Tønsberg)
Appendix 5: Competence goals in physical education-upper secondary school (In Norwegian)

Kompetansemål i faget

etter Vg1

Idrett og dans

*Mål for opplæringa er at eleven skal kunne*

- utvikle ferdigheter i individuelle idrettar og lagidrettar
- forklare og praktisere sentrale reglar i utvalde idrettar
- praktisere danseformer frå ulike kulturar
- skape dansekomposisjonar og vere med i dans som andre har laga
- gjere greie for og praktisere førebygging av og førstehjelp ved idrettsskadar

Friluftsliv

*Mål for opplæringa er at eleven skal kunne*

- praktisere friluftsliv med naturen som matkjelde

Trening og livsstil

*Mål for opplæringa er at eleven skal kunne*

- planleggje og gjennomføre oppvarming i samband med ulike treningsaktiviteter
- bruke treningsmetodar og øvingar innanfor treningsformene uthald, styrke og rørsleevne
- forklare viktige faktorar som verkar inn på treningsformene uthald, styrke og rørsleevne
- forklare, demonstrere og bruke gode arbeidsteknikkar og -stillingar

Kompetansemål etter Vg2

Idrett og dans

*Mål for opplæringa er at eleven skal kunne*

- vidareutvikle ferdigheter i individuelle idrettar og lagidrettar
- utarbeide og gjennomføre ulike treningsopplegg med sikte på å forbedre ferdigheter i idrett og dans

Friluftsliv

*Mål for opplæringa er at eleven skal kunne*
• planlegge, gjennomføre og vurdere opphold i naturen, og gjere greie for korleis mat, utstyr og klede kan verke inn på opplevinga av naturen

**Trening og livsstil**

*Mål for opplæringa er at eleven skal kunne*

• bruke treningsmetodar og øvingar innanfor spenst, snøggleik, koordinasjon og teknikk
• planlegge, gjennomføre og vurdere eigentrening som inneholder trening av uthald, styrke og rørslievne
• forklare grunnleggende prinsipp for trening
• forklare viktige faktorar som påverkar eigentrening og livsstil

**Kompetansemål etter Vg3**

**Idrett og dans**

*Mål for opplæringa er at eleven skal kunne*

• vurdere og forbedre eigne treningsopplegg
• meistre ein individuell idrett og ein lagidrett
• vise evne til forpliktande samarbeid, fair play, toleranse og omsorg

**Frilufts liv**

*Mål for opplæringa er at eleven skal kunne*

• planlegge, gjennomføre og vurdere turopplegg med kart og kompass som hjelpemiddel

**Trening og livsstil**

*Mål for opplæringa er at eleven skal kunne*

• praktisere og grunnlegge trening som er relevant for å fremme god helse
• planlegge, gjennomføre og vurdere ein eigentreningsperiode som byggjer på grunnleggsjande prinsipp for trening og er relevant ut frå føresetnadene og måla til eleven sjølv
• forklare og vurdere korleis fysisk aktivitet påverkar eins eigen livsstil
• drøfte moglege uheldige sider ved trening

**Vurdering i faget**

Retningsliner for sluttvurdering:
### Standpunktvurdering

<table>
<thead>
<tr>
<th>Årsstege</th>
<th>Ordning</th>
</tr>
</thead>
<tbody>
<tr>
<td>10. årssteget</td>
<td>Elevane skal ha ein standpunktkarakter.</td>
</tr>
</tbody>
</table>
| Vg1 for særlospfag i yrkesfaglege utdanningsprogram  
Vg2 yrkesfaglege utdanningsprogram  
Vg3 studieførebuande og yrkesfaglege utdanningsprogram i skole  
Vg3 påbygging til generell studiekompetanse | Elevane skal ha ein standpunktkarakter ¹ |

¹ Der faget går over fleire år, skal eleven berre få standpunktvurdering på det øvste nivået i faget.

### Eksamen for elevar

<table>
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<th>Ordning</th>
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<tbody>
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</tr>
</tbody>
</table>
| Vg1 for særlospfag i yrkesfaglege utdanningsprogram  
Vg2 yrkesfaglege utdanningsprogram  
Vg3 studieførebuande og yrkesfaglege utdanningsprogram i skole  
Vg3 påbygging til generell studiekompetanse | Elevane har ikkje eksamen. |

### Eksamen for privatistar

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<th>Ordning</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Det er inga privatistordning i faget.</td>
</tr>
</tbody>
</table>
| Vg2 yrkesfaglege utdanningsprogram  
Vg3 studieførebuande og yrkesfaglege utdanningsprogram i skole | Privatistane skal opp til ein skriftleg eksamen som blir utarbeidd og sensurert lokalt. |

Dei generelle retningslinene om vurdering er fastsette i forskrifta til opplæringslova.
Appendix 6: Pre-test-sheet - comments to each question in the questionnaire

Pre-test

Kommentarer til spørreskjemaet

Spørsmål 1:

Spørsmål 2:

Spørsmål 3:

Spørsmål 4:

Spørsmål 5:

Spørsmål 6:

Spørsmål 7:

Spørsmål 8:

Spørsmål 9:
Appendix 7: Frequency tables of the criteria Skill, Effort and Knowledge

**Weighting of the criteria Skill in the summative assessment with a grade (Vekting av Ferdighet i vurderingen)**

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**Weighting of the criteria Effort in the summative assessment with a grade (Vekting av Innsats i vurderingen)**

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</table>
Weighting of the criteria Knowledge in the summative assessment with a grade (Vekting av Kunnskap i vurderingen)

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<th>Cumulative Percent</th>
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</table>
Appendix 8: Results of which individual premises physical education teachers take into account when they assess

<table>
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<tr>
<th>Take into account obesity (Tar hensyn til fedme)</th>
<th>Frequency</th>
<th>Percent</th>
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<table>
<thead>
<tr>
<th>Take into account bullying (Tar hensyn til mobbing)</th>
<th>Frequency</th>
<th>Percent</th>
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</thead>
<tbody>
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<table>
<thead>
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<th>Take into account motivation issues (Tar hensyn til motivasjonsproblemer)</th>
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<td>82</td>
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### Take into account difficult home conditions (Tar hensyn til vanskelige hjemmeforhold)

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### Take into account allergies (Tar hensyn til allergier)

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### Take into account dyslexia (Tar hensyn til dysleksi)

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### Take into account injuries (Tar hensyn til skader)

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### Take into account physical disability (Tar hensyn til fysiske handikap)

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### Take into account asthma (Tar hensyn til astma)

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### Take into account anxiety (Tar hensyn til angst)

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