DISSERTATION FROM THE
NORWEGIAN SCHOOL OF
SPORT SCIENCES
2024

Eirik Aarskog

'The How of Decision-Making.'

A Qualitative Investigation of Student Decision-Making When Learning in Physical Education

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In loving memory of Dag Aarskog (18.01.1957 – 06.06.2023)

Dad, I was so looking forward to sharing the dissertation with you and getting your feedback. I always said you would get a copy when it was finished. I know you were looking forward to reading it, attending my trial lecture and public defense, and hopefully celebrating my doctoral with me. While this will never come true, I know you were proud of me. I'll always love you, always miss you, and always keep you in my heart.

Sammendrag

Det tematiske fokuset I denne artikkelbaserte avhandlingen er elevmedvirkning i kroppsøving. Nærmere bestemt er fokuset å utforske elevers delaktighet i beslutnings-prosesser som del av egne læringsprosesser i faget kroppsøving. Basert på en litteraturgjennomgang av tidligere kroppsøvingsforskning på området, både i norsk og internasjonal litteratur, argumentere jeg i avhandlingen for at det synes å være behov for komplementerende forskning på tematikken. På grunnlag av litteraturgjennomgangen argumenterer jeg videre for at det kan være behov for forskning som undersøker elevers beslutningsprosesser ved å fokusere primært på elevers handlinger, tanker og interaksjoner innenfor rammene av kroppsøvingsfaget. Et argument som fremheves er at selv om lærerens tanker og handlinger kan gi verdifull informasjon om elever, er det mangel på undersøkelser som spesifikt retter seg mot elevers handlinger og tanker innenfor lærerstyrte kontekster i kroppsøving. Videre fremheves det at kroppsøvingsforskning som omhandler elevers medvirkning i beslutningsprosesser i liten grad kobler påstander om læringseffekter til eksplisitte læringsteoretiske posisjoner. Med dette som bakteppe beskriver avhandlingen et progressivt forskningsprosjekt rettledet av følgende fire forskningsspørsmål:

(1) ***Hvordan kan elevers beslutningstagning konseptualiseres med en eksplisitt læringsteoretisk kobling?***
(2) ***Hvordan kan elevers beslutningsprosesser undersøkes gjennom å undersøke elevers handlinger, refleksjoner og interaksjoner?***
(3) ***Hvordan medvirker elever I vurderingsprosesser I kroppsøvingsfaget?***
(4) ***Hvordan medvirker elever I forhandlingsprosesser om hva, hvordan, hvorfor i kroppsøvingsfaget?***

For å besvare disse problemstillingen har det teoretiske perspektivet til John Dewey blitt valgt og anvendt for å konseptualisere elevers beslutningsprosesser som del av egne læringsprosesser. Innenfor det teoretiske rammeverket som er blitt utviklet er det slik at elever alltid vil fatte valg som del av egen læring, enten gjennom å ta bevisste eller ubevisste beslutninger. Det teoretiske rammeverket som presenteres i avhandlingen skisserer videre hvordan disse beslutningsprosessene både kan være individuelle og sosiale, og gir videre innsikt i hvilke pedagogiske potensialer som kan ligge i ulike former for beslutningstagning. Valget av dette teoretiske rammeverket har en rekke implikasjoner som fikk videre betydning

i utviklingen av en metodologi for å undersøke elevers beslutningsprosesser. Metodologien som ble utviklet gjennom prosjektet, er detaljert beskrevet i avhandlingen, både i forhold til utviklingsprosessen og i forhold til implementeringen av metodologien i undersøkelsen av kroppsøving i to norske ungdomsskoleklasser.

Resultatet av det metodologiske og påfølgende analytiske arbeidet er tre publiserte artikler. Den første artikkelen som ble publisert er *What were you thinking? A methodological approach for exploring decision-making and learning in physical education.* Denne artikkelen adresserer avhandlingens to første problemstillinger, gjennom å presentere en konseptualisering av beslutningsprosesser som del av individuell læring og en metodologi utviklet for å undersøke slike beslutningsprosesser.

Den andre publiserte artikkelen, *'No assessment, no learning' exploring student participation in assessment in Norwegian physical education (PE)*, er utviklet for å svare på forskningsspørsmål 3. Samtidig eksemplifisere den hvordan metodologien kan bidra til innsikt i elevers deltagelse i vurderingsprosesser i kroppsøving. Artikkelen bidrar med innsikt i hvordan elever fra to norske ungdomskoler deltar i vurderingsprosessene som skjer i kroppsøving. Et sentralt argument i artikkelen er at det fra det Dewey inspirerte rammeverket som artikkelen bygger på, er det slik at all vurdering er en form for beslutningsprosess, og at elever alltid vil vurdere når de lærer. Fra dette perspektivet er det derfor ikke *om* elever er med i vurdering i kroppsøving som blir det sentrale spørsmålet, men *hvordan* de er med. Her påpeker artikkelen at selv om elever er delaktige i vurderingen som skjer i kroppsøving på ulike måter, så virker det å ligge et pedagogisk potensial for lærere til å veilede elever til å benytte refleksive prosesser i større grad enn det de tilsynelatende benytter og blir veiledet til å benytte i de studerte kontekstene.

Den tredje artikkelen, *'When it's something that you want to do.' Exploring curriculum negotiation in Norwegian PE*, er utviklet for å adressere forskningsspørsmål 4. Også denne artikkelen bidrar samtidig ved å eksemplifisere hvordan metodologien kan bidra til innsikt i elevers delaktighet i forhandlingsprosesser i kroppsøving. Artikkelen viser at elever virker å delta i en mengde eksplisitte og implisitte forhandlingsprosesser i kroppsøving. Et av hovedargumentene i artikkelen er at det virker å ligge et pedagogisk potensial i å gjøre en del av de implisitte forhandlingene som foregår i kroppsøving eksplisitte. Artikkelen argumentere

samtidig for at det eksisterer forhandlinger som av pedagogiske årsaker ikke bør gjøres eksplisitte. Ifølge artikkelen er dermed det å kunne benytte det pedagogiske potensialet som ligger i ulike forhandlingsprosesser avhengig av reflekterte lærere som tar valg med bakgrunn i kjennskap til egne elever.

Samlet, ut fra både det teoretiske rammeverket, de metodologiske innsiktene og funnene fra de tre artiklene, argumenterer avhandlingen for at elever virker å medvirke i en rekke beslutningsprosesser som skjer i kroppsøvingsfaget. Slik sett bidrar denne avhandlingens med funn og argumenter som viser sider ved elevers handlinger og tanker som ikke er beskrevet i særlig grad i tidligere forskning på feltet. Et hovedargument i avhandlingen er at det er det konseptuelle rammeverket som er utviklet og det metodologiske blikket på elevers handlinger tanker og interaksjoner som leder til denne typen ny innsikt. Avhandlingens hovedbidrag er slik sett argumentert å være konseptuelle, metodologiske og empiriske innsikter som gjøre det mulig å forstå elevers beslutningsprosesser i kroppsøvingsfaget på nye måter. Disse nye måtene er videre koblet til et spesifikt læringsteoretisk ståsted, som igjen gir tilgang til ideer og tanker om hvordan lærere kan handle for å utnytte potensialet som kan ligge i elevers beslutningsprosesser i faget.

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Abstract

The thematic focus of this article-based dissertation is student decision-making in connection to student learning in physical education (PE). Based on a review of previous Norwegian and international PE literature, the dissertation argues that complementary research on this topic seems beneficial. The review further indicates that it would be beneficial to investigate students' decision-making processes by primarily focusing on students' actions, thoughts, and interactions within the context of PE. The central idea is that while teachers' thoughts and actions can provide valuable information about students, there is a lack of studies that specifically target students' actions and thoughts within teacher-led PE. Furthermore, the dissertation emphasizes that research in PE related to students' decision-making processes seldom connects claims about learning effects to explicit learning theoretical positions. With this background, the dissertation presents a progressively developing research project guided by the following four research questions:

(1) How can student decision-making be conceptualized with an explicit learning theoretical connection?
(2) How can student decision-making be investigated by focusing on student actions, reflections, and interactions?
(3) How do students participate in assessment processes occurring in Norwegian PE?
(4) How do students participate in curriculum negotiation in Norwegian PE?

In response to these research questions, Deweyan theory is applied to conceptualize decision-making. Within the developed framework, decision-making is conceptualized as an integral part of every learning process, where students "choose" how to solve indeterminate or problematic situations through behavioral processes that involve differing degrees of thought and reflection. The theoretical framework presented in the dissertation further outlines how these decision-making processes can be both individual and social and provide insights into the pedagogical potentials that different forms of decision-making may hold. The choice of this theoretical framework has several methodological implications that were significant when developing a methodology to investigate students' decision-making in PE. The methodology developed throughout the project is detailed in the dissertation, both in terms of its development process and its implementation in the physical education classes of two Norwegian junior high school classes.

The result of the methodological and subsequent analytical work is three individual published articles. The first published article is titled: *What were you thinking? A methodological approach for exploring decision-making and learning in physical education.* This article addresses the first two research questions by presenting a conceptualization of decision-making processes as part of individual learning and a methodology developed to investigate such decision-making in PE.

The second published article, *"No assessment, no learning" exploring student participation in assessment in Norwegian physical education (PE),* is mainly designed to address research question three. Still, it also exemplifies how the methodology can provide insights into students' participation in assessment processes in physical education. The Article provides insight into how students from two Norwegian junior high school classes participate in the assessment processes that occur in PE. A central argument in the article is that, from the Dewey-inspired framework developed, all assessment is a form of decision-making, and students will always assess as they learn. From this perspective, the central question is not if students participate in assessment in physical education but how they do so. The article points out that although students participate in assessment in various ways, there seems to be pedagogical potential for teachers to guide students to use reflective processes to a greater extent than they do in the studied PE contexts.

The third article, *"When it's something that you want to do." Exploring curriculum negotiation in Norwegian PE* is mainly developed to address research question four. Still, this article also serves as an example of how the methodology can provide insights into students' participation in negotiation processes in physical education. The article shows that students appear to engage in numerous explicit and implicit negotiation processes in physical education. One of the main arguments in the article is that there seems to be pedagogical potential in making some of the implicit negotiations that occur in physical education explicit. The article further argues that there are negotiations that, for pedagogical reasons, should not be made explicit. According to the article, the ability to utilize the pedagogical potential inherent in various negotiation processes depends on reflective teachers making intelligent choices based on the knowledge of their own students.

In conclusion and contrary to much previous research, the dissertation, based on both the theoretical framework, methodological insights, and findings from the three articles, proposes that students seem to participate in a range of decision-making processes in PE. Thus, this dissertation contributes findings and arguments that provide insights into aspects of students' actions and thoughts previously underreported in the field. A key argument in the dissertation is that it is the conceptual framework developed and the methodological focus on students' actions, thoughts, and interactions that lead to this type of new insight. The main contribution of the dissertation is therefore argued to be the conceptual, methodological, and empirical insights developed that, in turn, provide new understandings of students' decision-making processes in PE. Further, by being connected to a specific learning theoretical perspective, the insights held provide ideas and thoughts for how teachers can act to harness the educational potential of the decision-making processes students constantly enter in the subject of PE.

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Eirik Aarskog
Hamar, 31.10.2022

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Aarskog, E. (2020). 'No assessment, no learning' exploring student participation in assessment in Norwegian physical education (PE). *Sport, Education and Society, 1-14.* https://doi.org/10.1080/13573322.2020.1791064

Aarskog, E., Barker, D., & Borgen, J. S. (2021). 'When it's something that you want to do.' Exploring curriculum negotiation in Norwegian PE. *Physical Education and Sport Pedagogy, 1-14.* https://doi.org/10.1080/17408989.2021.1934660

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List of abbreviations

PE – Physical education.

LK06 – Knowledge Promotion 2006, The Norwegian core curriculum in effect when the research was conducted.

AfL – Assessment for learning.

SRI's – Stimulated recall interviews.

The research team – The research team consisted of Eirik Aarskog, Jorunn Spord Borgen, and Øyvind Førland Standal up until analysis for the first paper began. After this, the research team consisted of Eirik Aarskog, Jorunn Spord Borgen, and Dean Barker.

The second researcher – The second researcher participating in the observation period and preliminary analysis conducted in the research design was Jorunn Spord Borgen.

NSD - Norwegian Center for Research Data.

Chapter 1: Introduction

The overall purpose of the study presented in this article-based dissertation is to explore how students participate in decision-making as part of learning experiences in physical education (PE). The study was conducted by following a progressive research focus exploring: (1) How student decision-making can be conceptualized with an explicit learning theoretical connection; (2) How student decision-making can be investigated through exploring student actions, reflections, and interactions, and; (3) How do students participate in decision-making as assessment and curriculum negotiation in Norwegian PE. To address the three focus areas, selected parts of Dewey's theoretical perspective were applied to conceptualize different forms of student-decision making and connect these to learning. A specific qualitative research design was developed and used within the Norwegian PE context to produce knowledge about student decision-making. The result of the research is three published academic articles. The articles, if viewed together, address the overall purpose of the dissertation by providing theoretical, methodological, and empirical insights suggested relevant to PE practice and research.

Before turning to the theoretical framework, the research process conducted, and the knowledge produced, this introductory chapter will focus on why. Why explore student decision-making in PE? In the following sections, I will answer this "why" question by briefly addressing the Norwegian school policy concerning student participation in educational decision-making. After this, a detailed review of previous PE decision-making and learning literature is presented. This is followed by a summary of different patterns and trends discovered in the review. The chapter concludes by presenting the specific research questions developed and explored in the study.

1.1 Student decision-making in the Norwegian school system and PE

In the Norwegian school system, student participation in educational decision-making is framed as part of the intended pedagogy and a legal right for students. It is, therefore, relevant to present some historical and current aspects of this context that can shed light on this central aspect of Norwegian education. In Norwegian schools, the right to participate in decision-making has its roots in different children's rights developed during the 19th and 20th centuries (Grindheim et al., 2021). Concurrent with developing children's rights, pedagogical

and learning theoretical perspectives and educational policy goals have moved towards a more democratic orientation (Grindheim et al., 2021). Therefore, the idea that students should participate in educational decision-making is not new in Norway. For example, both the national curriculum of 1974 (Kirke- og Undervisningsdepartementet, 1974, p.21) and the national curriculum of 1987 (Kyrkje og Undervisningsdepartementet, 1987, p.54) show how student participation in decision-making has been an intended part of the pedagogy prescribed by Norwegian policy. With the national curriculum LK06[1] (Kunnskapsdepartemetet, 2006), students' right to participate was taken further than before. This text states that students have the legal right to participate in decision-making regarding the planning, implementation, and assessment of their learning according to their age and maturity. This right to participate is also explicitly stated to relate to their daily school life and the different school subjects. LK06 further suggests that such participation benefits student motivation, increases student awareness and involvement in their learning processes, and increases students' abilities to make conscious choices in the future (Kunnskapsdepartemetet, 2006, p.33). After 2006, the right to participate in decision-making was explicitly added to the first paragraph of the Norwegian educational law in 2008[2] (Lov om grunnskolen og den vidaregåande opplæringa, 2008) and is carried through in the current national curriculum called Kunnskapsløftet 2020 (Kunnskapsdepartementet, 2017).

In Norway, student participation in educational decision-making has thus been part of the intended pedagogy of national curriculums for at least 50 years. It is, therefore, reasonable to expect teachers working in Norway to be familiar with policy prescribing student participation in educational decision-making. This does, however, not necessarily mean that there is a correspondence between policy and practice (see e.g. Goodlad, 1979). Investigating student decision-making in this context can be valuable because it provides insight into if and how this part of policy becomes practiced. To demonstrate that further understanding of this issue seems beneficial, I will turn to previous PE literature related to decision-making. First, though, some space is dedicated to describing how literature was located and reviewed.

[1] The core curriculum in effect during the empirical research process.
[2] The explicit focus on the right to participate in decision-making (in Norwegian; rett til medverknad) was added to the first paragraph in the revision of the law in 2008.

1.2 Review of PE decision-making literature

The review process can be characterized as an iterative and ongoing process. As part of this process, systematic searches followed by analysis with different purposes were conducted at multiple stages in the project. The search processes were systematic and used various keywords such as; *'student participation', 'decision making', 'student choice', 'student agency', 'student voice', 'student autonomy', 'learning', 'assessment' and 'curriculum negotiation'*, in combination with *'physical education'* OR *'PE',* as well as their Norwegian equivalents. These keywords have been used in databases (Web of Science, Sport Discus, ERIC, ORIA, and Google Scholar). In these searches, the inclusion criteria were published after 2000, peer-reviewed, and written in English or Norwegian.[3] The searches were complemented with a snowball approach (Wohlin, 2014) and identifying Norwegian-specific literature by critically reviewing two literature overview reports (Jonskås, 2010; Løndal et al., 2021).[4] The findings from these searches were then organized and analyzed to identify general patterns and trends within Norwegian and international literature related to student decision-making in PE.

Analysis of the results started by excluding duplicates and removing irrelevant results based on reading titles, abstracts, and complete text/chapters. During full-text readings, I took notes about the semantic content as a first step in a version of Braun and Clarke's (2006) thematic analysis. The notes were used as codes when creating themes using the group function in the referencing program EndNote. New groups were created whenever a new code did not fit existing groups. The thematic structure created was then used in subsequent analysis when writing the three articles in the dissertation. Literature deemed relevant for each article was re-read, and I searched for both latent and semantic themes (Braun & Clarke, 2006). Notably, the results of the review presented are not exhaustive. Instead, the review seeks to exemplify general patterns and trends identified. It does this by referring to literature deemed relevant both for the research questions posed and the discussions and conclusions contained within the dissertation. The literature identified is presented under five main headings: (1) Learning and student decision-making in PE; (2) The narrative of PE as a teacher-centered subject; (3) Solving the problem of "too little" student decision-making in PE; (4) Decision-making as student actions and interactions in PE, and; (5) Student decision-making within the Norwegian PE context.

[3] See appendix 1 for an example of a search and exclusion log.
[4] The first report was used in most stages, while the latter was used in the late stages of the project.

1.2.1 Learning and student decision-making in PE

PE scholars in several areas have proclaimed student decision-making important for student learning (e.g. Barker et al., 2017; Goodyear & Dudley, 2015; López-Pastor et al., 2013; MacPhail et al., 2008). PE-related motivational literature, for example, suggests that increasing and supporting student involvement in decision-making will improve student learning (see e.g. Hastie et al., 2013; Shen et al., 2009; Sun et al., 2017; Ulstad et al., 2018; Van den Berghe et al., 2014). Other theorists have proposed that for students to be engaged in PE lessons, they must be involved in the conceptualization, implementation, and evaluation of PE curricula (Brooker & Macdonald, 1999; Smith et al., 2009). A common argument is that if teachers enable students to make decisions, students feel more respected, listened to, and autonomous (Howley & Tannehill, 2014; Mitchell et al., 2015). Enright and O'Sullivan (2010) even suggest that helping students take ownership of their learning is energizing and exciting and produces deep learning and insights.

These examples of PE scholarship serve as examples to illustrate general trends. One trend is that PE scholarship tends to present student decision-making as important for student learning (e.g. Azzarito et al., 2006; Enright & O'Sullivan, 2010; Fisette, 2013). Another is that this research tends to omit references to the learning theoretical position from which claims about learning benefits are made (see e.g. Amade-Escot, 2006; Barker et al., 2015b for exceptions). As Van den Berghe et al. (2014) points out, in this literature, claims about learning are often based on empirical data that suggest decision-making increases learning. One should, however, be aware that many of the studies base claims about learning benefits on measured levels of motor performance, increased activity levels, or perceived motivation. While these variables can indicate learning, they do not necessarily reflect learning in terms of reaching the educational purposes of a given PE program (Van den Berghe et al., 2014).

1.2.2 The narrative of PE as a teacher-centered subject

While PE scholars tend to connect student decision-making and learning without an explicit learning theoretical foundation, most constructivist and sociocultural learning theories support the claim that student decision-making is vital for learning (Dysthe, 2001). A question worth addressing, therefore, is whether students get opportunities to participate in educational decision-making in PE. A common way to refer to student opportunities for decision-making within PE scholarship is by referring to different teaching styles (e.g. Sanchez et al., 2012; SueSee & Barker, 2019). Mosston and Ashworth's (2008) spectrum of styles, for example,

suggests that teaching styles differ with respect to the extent to which students and teachers can make decisions. Their claim is that within different phases of teaching moments, before, during, and after lessons, there exist different opportunities for making decisions. Further, the spectrum presents a continuum of 'teaching styles' where lessons in which teachers make most or all the decisions are deemed *teacher-centered*, and lessons where students are provided room to make decisions are considered *student-centered*. Within this framework, decision-making opportunities are presented as a zero-sum game; if teachers make more decisions, fewer are left for students to make, and vice versa.

One area of PE research that refers to student decision-making by referring to teaching styles is macro-level research focusing on how PE is enacted. Several scholars present PE as a teacher-centered subject (e.g. Larsson & Karlefors, 2015; Smith et al., 2009). For example, Kirk (2010, p.3-4), with reference to Mosston and Ashworth (2008), presents PE as a subject that typically offers students few opportunities for decision-making. He claims that teachers commonly focus on teaching sports techniques within large classes utilizing *the command style* of teaching. According to Mosston and Ashworth (2008), the command style is a teaching style where 'the role of the teacher is to make all the decisions, and the role of the learner is to follow these decisions on cue' (Mosston & Ashworth, 2008, p.73).

Scholars focusing on assessment for learning (AfL) have also suggested that teacher-centered practices dominate PE. While some AfL literature shows how AfL principles can enhance student opportunities for educational decision-making (e.g. MacPhail & Halbert, 2010), other scholars suggest that such principles are often intended rather than practiced (e.g. Redelius et al., 2015; Tolgfors, 2018). As Moura et al. (2021) suggest, 'there is a literature base in physical education suggesting that AfL in physical education remains conceptually weak and absent from teachers' practices' (p.395). While many innovative student-centered approaches to assessment exist (López-Pastor et al., 2013; Moura et al., 2021), such practices are found to be 'far from regular, integral, widespread and educationally productive' (López-Pastor et al., 2013, p.73).

Again, the examples can be viewed as part of a larger trend. Much of the literature on teaching in PE claims that while student-centered approaches are possible and even educationally superior, teacher-centered approaches are more frequent and normal. Literature

using terms such as teacher-centered and student-centered thus presents a story where PE is a subject dominated by teacher-centered approaches to teaching. This narrative, in turn, creates a problem in need of solving. By being a subject predominately taught through teacher-centered teaching styles, the problem becomes that students are left with few opportunities to make decisions (e.g. Howley & O'Sullivan, 2021a; Moura et al., 2021). This narrative can, however, be questioned. Mosston and Ashworth (2008), for example, suggest that teacher-centered approaches are not necessarily problematic. They argue that teaching can be effective regardless of who makes decisions and stress that no teaching style is inherently better. A key observation here is that while utilizing teacher-centered teaching styles is not necessarily problematic, it *can* become problematic if viewed from particular perspectives (e.g. Dysthe, 2001; Hopfenbeck, 2011; Zimmerman, 2000).

1.2.3 Solving the problem of "too little" student decision-making

A central claim made so far is that PE scholarship often presents PE as a subject where students need more opportunities to make choices. An implication often presented is that the subject needs to involve students more in decision-making processes (e.g. Brooker & Macdonald, 1999; How et al., 2013; Howley & O'Sullivan, 2021a; Kirk, 2010). The rationale for this assertion is that learning opportunities will be missed without changes (e.g. Beni et al., 2017; Enright & O'Sullivan, 2010). However, different areas of PE scholarship view the problem and its possible solutions from different perspectives.

In the PE curriculum negotiation literature (e.g. Enright & O'Sullivan, 2010; Howley & Tannehill, 2014), the central problem with too little student decision-making is that it hinders engagement. A claim made by several scholars working within this area is that utilizing *a purposeful negotiation of the curriculum* is a productive way of getting students motivated (e.g. Guadalupe & Curtner-Smith, 2019b; Guadalupe & Curtner-Smith, 2020). Here, purposeful negotiation involves teachers taking deliberate actions to include students in planning and implementing content. Guadalupe and Curtner-Smith (2019a) describe this as employing inquiry-based and student-centered methods, where teachers are 'facilitating discussions, listening, and responding to students, valuing their voices, and taking notice of their feedback when making curricular decisions' (p.2). Literature focusing on purposeful negotiation contains empirical findings indicating that employing purposeful curriculum

negotiation increases student engagement and motivation (e.g. Enright & O'Sullivan, 2010; Fisette, 2013; Guadalupe & Curtner-Smith, 2020; Howley & Tannehill, 2014).

Game sense literature is another example of PE research that presents little student decision-making as problematic (e.g. Butler, 2006; Miller, 2015). The problem with too little student decision-making is not primarily that it hinders engagement or motivation but rather that it prevents students from learning game-playing skills. Decision-making here often refers to the ways that students think about and respond to certain stimuli in game situations (see e.g. Light et al., 2014; I. Renshaw et al., 2010). Decision-making is viewed as an integral part of playing games and is seen as inseparably connected to game-specific motor capabilities (Smith, 2016). Decisions made concerning games are further considered skills to be practiced and learned to improve gameplay (O'Connor et al., 2017). According to Harvey and Jarrett (2014), developing decision-making skills is fundamental for many teaching models, such as teaching games for understanding (see e.g. Butler, 2006; Kirk & MacPhail, 2002; MacPhail et al., 2008) that have been developed, at least partly, as a response to a perceived lack of decision-making skill development within PE.

While other research also proposes ways to increase or improve student decision-making (Brooker & Macdonald, 1999; How et al., 2013; Kolovelonis et al., 2011; Lakes & Hoyt, 2004), the areas presented above can help illustrate another central point in PE decision-making scholarship. The point is that while this body of literature views the problem from different perspectives and provides possible solutions to increase student decision-making, they rarely question whether too little student decision-making is a problem. The scholarly work presented instead seems to work from the assumption that it is.

1.2.4 Decision-making as student actions and interactions in PE

The review so far contains several areas of PE scholarship where PE is presented as a subject with few opportunities for students to make decisions. There is, however, literature that offers alternative perspectives. Scholars such as Amade-Escot (2005), or more recently, Quennerstedt et al. (2014) present learning as different forms of negotiation that occur through interactions and communication, resulting in co-construction of knowledge (see also Amade-Escot, 2006; Amade-Escot & O'Sullivan, 2007). In this work, decision-making, in the form of social negotiation processes related to content, is not something a teacher must

initiate, nor a skill to be learned, but an integrated part of every teaching-learning process. While this literature positions the teacher as a central actor within teaching-learning processes, it views the students as just as important. The conceptualization thereby diverges significantly from the literature that views PE as teacher-centered or student-centered.

Studies that investigate student decision-making through micro-level approaches that mainly focus on student actions and interactions within single school classes or smaller group settings in PE offer further examples (see e.g. Barker et al., 2015a; Barker et al., 2017; Brock et al., 2009). While such research is relatively scarce within the field of PE, it nevertheless presents a different perspective concerning student decision-making. Brock et al. (2009), for example, show how student status intervenes in a myriad of decision-making processes between students in one PE school class. Barker et al. (2017) provide an example of how student pre-knowledge can contribute to decision-making about which roles students take in group work. The central point is that within research that takes a micro-level view of student actions and interactions, the narrative of students either making no or few decisions in PE dissipates. When PE scholars focus their attention on student actions, reflections, and interaction rather than primarily on teacher actions and reflections, students make decisions all the time.

1.2.5 Student decision-making within the Norwegian PE context

As suggested by Løndal et al. (2021), PE literature from the Norwegian context before 2010 is scarce. In her overview report, Jonskås (2010) indicates that between 1978 and 2010, only three doctoral dissertations and nine peer-reviewed publications were published. In the years following, there has been a sharp increase in the number of publications (Løndal et al., 2021). Despite this increase, few publications are concerned with student decision-making. However, the literature related to decision-making appears to align with the review so far.

As in international PE research, Norwegian literature describes PE as a subject where teachers make most decisions about content and teaching-learning methods (Moen et al., 2018; Moen et al., 2015). This includes teachers making most decisions regarding assessment (Leirhaug & MacPhail, 2015). Leirhaug and Annerstedt (2016) argue that despite Norwegian policy urging teachers to include students in decision-making regarding their assessment, teachers seldom stimulate such decision-making. Norwegian PE students do, however, report that they have ideas and wishes about how they would change how the subject is taught (Pedersen et al.,

2019; Säfvenbom et al., 2015), and several publications highlight the mismatch between student wishes and the actual practices occurring (see e.g. Erdvik et al., 2014; Ommundsen, 2006; Ommundsen & Kvalø, 2007). The mismatch between student interests and classroom practices is described as potentially detrimental to motivation, engagement, and learning.

Not only is little student decision-making described as a problem, but it is also applied as a rationale for proposing different interventions or pedagogical models. Burchard Erdvik et al. (2019), Næss et al. (2014), Tangen and Nordahl Husebye (2019), and Bjørke and Moen (2020) provide different frameworks that increase student decision-making. Tangen and Nordahl Husebye (2019) and Næss et al. (2014) propose how decision-making can be used as a pedagogical tool to increase motivation, engagement, and learning. Bjørke and Moen (2020) suggest that providing students with decision-making opportunities as part of the cooperative learning model can increase learning. However, Erdvik et al. (2019) and Bjørke and Moen (2020) also point to challenges. Burchard Erdvik et al. (2019) suggest that providing choice does not increase student engagement. Bjørke and Moen (2020) argue that while the cooperative learning model seems to improve student learning, getting teachers to move from teaching through instructional methods to utilizing more student-centered approaches is challenging. The challenge of educational change in Norway is further substantiated by suggesting that while policy has changed over the years, PE teacher education (Moen & Green, 2014) and PE teacher practice (Arnesen et al., 2013) seem resistant to change.

1.3 Summary and a way forward

Both international and Norwegian PE literature present student participation in decision-making as important for learning (e.g. Enright & O'Sullivan, 2010; Leirhaug & Annerstedt, 2016). This claim has been substantiated within Norwegian national curriculums and educational policy for at least 50 years. Investigating student decision-making can thus be viewed as exploring an essential aspect of student learning. Still, given the phenomenon is widely explored in previous literature, what are the research gaps?

The review suggests that current decision-making scholarship in PE should make explicit the learning theoretical foundations used to make claims about learning. There is potential for conceptual frameworks that explicitly connect student decision-making and specific learning theoretical perspectives to be developed. If doing this, connections between decision-making

and learning can be understood, substantiated, or critiqued with a basis in the fundamental understandings that the claims are built upon. Presenting such conceptual frameworks can help academic work focusing on student decision-making to contribute towards cumulative knowledge building that considers compatibility or incompatibility concerning the learning theoretical position taken. According to Tinning (2015), this is needed if learning research in PE is to evolve into a 'mature field' (p.684).

The idea that students lack decision-making opportunities is used to claim this deficiency a central challenge in PE, and considerable efforts are being made to develop different models or interventions to solve this perceived problem (e.g. Howley & Tannehill, 2014; Tangen & Nordahl Husebye, 2019). However, the review identifies some publications that present another view. From this alternative perspective, students always make decisions whether teachers want them to or not (Brock et al., 2009). This research often contains micro-level investigations of student actions, reflections, and interactions and produces new insights and knowledge that challenge and complement dominating perceptions and taken-for-granted ideas. This suggests that research adopting a student-centered micro-level view can be beneficial within the field.

A third and related issue is that much of the literature indicates a mismatch between Norwegian policy and practices in Norwegian PE. Within the Norwegian context, research into the three pedagogical areas of planning, implementation, and assessment in PE indicates that while students have the right to participate in decision-making in these areas, this right might be disregarded. From a Norwegian-specific perspective, it is therefore relevant to investigate student participation in planning, implementation, and assessment by taking a micro-level view of student actions, reflections, and interactions.

A fourth issue is that while a range of methodological approaches holding theoretical frameworks, research designs, and methods that *can* be used to investigate student decision-making were identified in the review (see e.g. Amade-Escot, 2005; MacPhail et al., 2008; Quennerstedt et al., 2014; Quennerstedt et al., 2011), a methodology explicitly developed to investigating student decision-making in relation to student learning was not identified. Therefore, creating such a methodology is a task that seems to hold a potential for contributing knowledge relevant to those interested in student decision-making in PE.

1.4 Research questions and disposition

The overarching purpose of this dissertation is to explore student participation in decision-making in PE. The central issues identified in the literature review indicate that a beneficial start can be to explore how student decision-making can be conceptualized and investigated as an integral part of student learning. Concerning this, the review suggests that developing an explicit connection between student decision-making and a learning theoretical perspective can be beneficial. Further, it suggests that there is a lack of methodologies developed specifically for investigating student decision-making through student-centered micro-level investigations. Two research questions were initially posed to address these gaps:

(1) How can student decision-making be conceptualized with an explicit learning theoretical connection?

(2) How can student decision-making be investigated by focusing on student actions, reflections, and interactions?

Exploring these two research questions can, however, not on their own provide insights into how students participate in educational decision-making in PE. Following this, as well as Norwegian policy prescribing student participation in decisions regarding planning, implementation, and assessment in PE, two additional research questions were posed:

(3) How do students participate in assessment processes occurring in Norwegian PE?

(4) How do students participate in curriculum negotiation in Norwegian PE?

In the dissertation, all three articles produced and published provide insights relevant to the four research questions. It is, however, possible to view Article 1 (Aarskog et al., 2018) as primarily addressing research questions 1 and 2. Article 2 (Aarskog, 2020), the article that mainly focuses on research question 3, and Article 3 (Aarskog et al., 2021), the one that explicitly addresses research question 4. While all articles include their own theoretical and methodological sections, a more detailed presentation of the theoretical perspective applied is presented in Chapter 2. In Chapter 3, a detailed account of the methodologic choices made, how the methodology was developed, and how it was applied in the Norwegian PE context is presented. Chapter 4 summarizes the main findings and insights of each article before these are discussed in relation to the theoretical and methodological framework and previous literature in Chapter 5. The dissertation ends with providing concluding thoughts and suggestions for future research in Chapter 6.

Chapter 2: Theoretical Framework

This chapter presents how parts of John Dewey's theoretical perspective have been used to provide the primary analytical framework. The choice of utilizing the Deweyan perspective was initially inspired by looking at previous PE literature, where his theories have provided valuable insight into cognitive, practical, emotional, and social dimensions of learning (see e.g. Casey & Quennerstedt, 2020; Næss et al., 2014). In addition, the perspective provides insights relevant to investigating student decision-making and learning in PE (see e.g. Quennerstedt et al., 2011). When choosing to work with Dewey's perspective, one should be aware that his work has been robustly challenged for many years (Thorburn & MacAllister, 2013) and that Dewey's completed works are vast, evolving throughout his career (see e.g. Fesmire, 2014, p. 10), and contain several twists, turns and seeming contradictions.[5] One should also be aware that several books and articles present different interpretations and recommendations for how Deweyan theory could or should be understood (see e.g. Biesta & Burbules, 2003; Campbell, 1995; Fesmire, 2014). However, this chapter is not intended to guide how Dewey's theories *should* be understood. In line with Biesta and Burbules (2003), it is designed to present 'one possible way to understand his work' (p.9), and in particular, one way to understand selected parts of his work considered relevant to conceptualizing student decision-making in relation to learning.

2.1 Learning and decision-making in Deweyan theory

While Dewey's education theories, in general, can be characterized as primarily focused on democratic education and growth, Dewey did write extensively about learning (Biesta & Burbules, 2003; Fesmire, 2014). When presenting Dewey's theories concerning learning, it is evident from writings such as *Experience and Nature* (Dewey, 1929a), *Art as Experience* (Dewey, 1934/1980), and *Experience and Education* (Dewey, 1938/1997) that it is hard to avoid the term *experience.* Biesta and Burbules (2003, p. 28) suggest that experience is one of the most problematic notions in his work because the meaning ascribed by Dewey deviates from a long line of other understandings of experience. For Dewey, the term experience denotes the transactions between living organisms and their environment, and he suggested that every experience always holds a dual relationship. As an organism acts in

[5] As pointed out by Richard Shusterman in his 2008 book *Body Consciousness* (p.180-181), one example of a turn can be Dewey's view on the body. There is a vast difference between his treatment of the body as merely the organ of the soul, which is present in Dewey's early writings (as a neo-Hegelian idealist), and the celebration of the mind-body which appear in his middle and later works.

its environment, the environment simultaneously "acts" back upon the organism. To use Dewey's words: 'When we experience something, we act upon it, we do something with it; then we suffer or undergo the consequences. We do something to the thing and then it does something to us in return: such is the peculiar combination' (Dewey, 1916/1980, p.151). In *Reconstruction in Philosophy,* he adds: 'This close connection between doing and suffering or undergoing forms what we call experience' (Dewey, 1920, p.86).[6]

According to Dewey, experiences, when viewed transactionally, do not necessarily result in new knowledge. However, he suggested that we can and do learn from them (e.g. Dewey, 1916/1980; Dewey, 1938, 1938/1997). His work even suggests that we can learn from experiences that do and do not involve cognition (Biesta & Burbules, 2003, p.33-51). While such a claim might not seem to fit with Dewey's assertion that all learning involves some form of thinking (see e.g. Dewey, 1916/1980, p.153-164), it makes sense in light of Dewey's claim that all experience is transformative (Dewey, 1938/1997, p.35). The possibility of learning from experiences that involve cognition and experiences that do not need cognitive intervention correspond to two different forms of learning. Learning as *habit* formation or alteration (see e.g. Dewey, 1938/1997, p.35), and learning as the generation of *warranted assertions* (see e.g. Fesmire, 2014, p.90). In relation to connecting learning and decision-making, this differentiation is further relevant because the difference in the learning processes that can result in habits and in warranted assertions enable us to differentiate between different modes of decision-making.

2.1.1 Trial and error and decision-making as perception

A central term in Dewey's perspective is the term habit. His view on habit builds on the idea that as we live our lives through organism-environment transactions, we always strive to maintain what Dewey called organism-environment coordination (Biesta & Burbules, 2003, p.32-36). In our day-to-day lives, such coordination is maintained through our habits. For Dewey, habit does not refer to fixed ways of doing things but to our predispositions to respond to our environment in particular ways (Dewey, 1922b, p.25). Habits are 'our basic sensitivities and ways of meeting and responding to all the conditions we meet in living' (Dewey, 1938/1997, p. 35); they 'constitute the self' (Dewey, 1922b, p.25) and are learned

[6] For a more detailed insight into how transaction *can* be understood within Deweyan theory see e.g. Biesta and Burbules (2003, p.25-29).

(Biesta & Burbules, 2003, p.36-37). Further, habits are neither necessarily nor mainly cognitive (Biesta & Burbules, 2003, p.36). They can rather be conceived as 'acquired predispositions to ways or modes of response' (Dewey, 1922b, p.42) that, while at times include cognition, are primarily behavioral (Biesta & Burbules, 2003, p.36-37). Dewey's work further suggests that habits can be developed through non-reflective processes as part of what he termed trial and error (Dewey, 1916/1980, p.157).

To understand learning as a process of trial and error, it is relevant to point out that in day-to-day life, pre-existing habits often enable us to maintain a dynamic balance with our environment. In such situations, we are not conscious of different stimuli as stimuli nor of responses as responses. We simply behave to reach particular objective ends (Dewey, 1896, p.365-366). For example, when you read this dissertation, you do not have to stop thinking about how to read; you read. You act out the habit of reading. There is, however, another type of situation that living organisms meet in life, one in which coordination still needs to be established. Such situations are what Dewey termed *indeterminate situations* (Dewey, 1912). They are situations where existing habits are either in conflict or do not suffice. An example of such situations related to PE practice is a person with no insight into the floorball game being given a stick and a ball and asked to score. To such a person, this would mean relatively little.[7] The person would know neither the stimuli nor the appropriate response to such stimuli (Dewey, 1912). According to Dewey, it is first and foremost when we face such situations that learning occurs.[8]

When we meet indeterminate situations, we need to figure out how to establish coordination. Dewey introduces the method of trial and error as one way forward. Dewey describes this method as a process where; 'We simply do something, and when it fails, we do something else, and keep on trying till we hit upon something which works, and then we adopt that method as a rule of thumb measure in subsequent procedure' (Dewey, 1916/1980, p.157). While such a process can involve conscious thought, it does not necessarily depend on it.

[7] For more detailed insight into the connection between habit and meaning see e.g. Biesta and Burbules (2003, p.35-37).

[8] Admittedly, this section now indicates that having pre-existing habits that work means that not all experience is transformative. Such a view would recertify the contradiction between all experience being on the one hand transformative and on the other, not. This contradiction can however be explained by looking to Dewey's term *plasticity.* Plasticity not only implies that habits can be formed or altered, but also affirmed. While habit affirmation might not involve learning per se, it can nonetheless be viewed as transformative. For more insight into plasticity and rigorous habits see e.g. Dewey (1916/1980, p.45-53).

Dewey presented *perception* as a process through which such situations *can* be solved through organic action (Biesta & Burbules, 2003, p.35-36).

To understand the term perception, it is essential to remember that Dewey's perspective implies that we are always in action (Biesta & Burbules, 2003, p.32). This, in turn, means that when facing indeterminate situations, we cannot stop acting; we can only change our responses to the situation. An indeterminate situation is thus where our actions fail to resolve the situation. When facing such situations, we start trying different lines of action to solve the situation. This process, which Dewey called perception, refers to an organism's search and constitution of stimuli through a tentative trial and error process of choosing an adequate response (Biesta & Burbules, 2003, p.35-38). Perception, when successful, leads to determining an appropriate organic response, which is the same as saying that we have developed or altered a habit. We have learned both the stimuli and an appropriate response to the situation.[9] This process is not necessarily cognitive. It can involve a process of unreflective trying that results in the person learning to act appropriately and even successfully. With respect to decision-making, it is also relevant that the process of perception can be viewed as a form of decision-making. As Dewey clarifies, perception is 'a process of choosing.' (Dewey, 1912, p.663). We can thereby locate a form of decision-making within Dewey's description of a possible method for learning. We find a conceptualization of decision-making as a process of subconscious perception.

2.1.2 Inquiry and decision-making

Warranted assertions refer to our conscious knowledge in Dewey's theories (see e.g. Fesmire, 2014, p.90). Developing such knowledge is described as a deliberate process that Dewey eventually came to term *inquiry* (see e.g. Biesta & Burbules, 2003, p.57-67). To explain how learning in terms of non-reflective habit formation differs from learning through conscious and partly cognitive processes enabling us to learn (intelligent) habits as well as warranted assertions, a helpful starting point can be to look to Dewey's term *problematic situations* (Biesta & Burbules, 2003, p.58-59).

[9] For a more comprehensive understanding of perception in relation to habit formation or alteration see e.g. Biesta and Barbules (2003, p.25-53)

Problematic situations refer to situations where we become conscious of the indeterminateness of a situation. It is when facing problematic situations Dewey pointed out that experience turns into a cognitive mode (Dewey, 1938, p.107). To illustrate the difference, we can return to the example of you reading this dissertation. You might subconsciously "feel" that the text is hard to follow and that the reading flow is somehow interrupted. Such an experience is not yet considered a problematic situation but constitutes an indeterminate experience. Suppose you consciously recognize and acknowledge this disruption of flow as problematic and determine that the source of this uneasiness should be identified. In that case, this "decision" changes the indeterminate situation into a problematic situation. In such an event, the methods now available for solving the situation are no longer just subconscious perception. Such situations can rather be conceived of as situations we can resolve by applying action and thought. Importantly, transforming indeterminate situations into problematic situations is itself the first step in such a process (Dewey, 1938, p.107).

Within Dewey's works, the learning processes that occur when thinking is introduced are described using different terms. Dewey describes the process using the term 'reflective thinking' in *How We Think* (Dewey, 1910/1997, p.68-78), 'reflective experience' in *Democracy and Education* (Dewey, 1916/1980, p.157-163), and 'inquiry' in *Logic: The Theory of Inquiry* (Dewey, 1938). While holding slightly different connotations, these terms are almost synonymous in Dewey's texts. The first two steps to this learning process (in the following addressed as inquiry) are to identify a problem and further specify it.[10] As Dewey writes in *An Analysis of Reflective Thought*, inquiry starts with; '(i) an occurrence of a problem, (ii) its specification' (Dewey, 1922a, p.29). The next three steps of inquiry are further explained in *How We Think* as: '(*iii*) suggestion of possible solution; (*iv*) development by the reasoning of the bearings of the situation; (*v*) further observation and experiment leading to its acceptance or rejection' (Dewey, 1910/1997, p.72).[11] Inquiry is thus much more comprehensive than trial and error because, in contrast to the immediate actions of trial and error, the process involves thought; it requires *deliberation* before and *reflection* after we act.

[10] In the extended abstract I use the term inquiry, but in the articles included in the dissertation, the term reflective experience is also used about this conscious learning process.

[11] The steps are slightly altered between how Dewey present them in *How We Think* (Dewey, 1910/1997, p.72) and his response to a criticism of this presentation of reflective though in *An Analysis of Reflective Thought* (Dewey, 1922a, p.29) The reason for turning to the latter reference when presenting the first two steps is because here Dewey takes the route of starting "inquiry" with a problematic situation, and not with the appearance of an indeterminate situation, which while necessary for reflective thought, is not part of inquiry.

For Dewey, deliberation is 'a dramatic rehearsal (in imagination) of various competing possible lines of action' (Dewey, 1922b, p.190). Through dramatic rehearsal, deliberation turns overt action into internal action in imagination. Deliberation is thus a process where we use previous knowledge to experiment with different lines of possible action in our imagination before we act. Concerning the decision-making that takes place as part of inquiry, deliberation dramatically enhances the complexity of the decision-making process. Decision-making is no longer just a subconscious process of choosing but becomes a conscious, controlled (in as far as we have control) and deliberate process. It takes the form of developing hypotheses about possible lines of actions, their probable consequences, and subsequent imaginary testing of these as part of the choosing. Dewey argued that while the intervention of deliberation in no way guarantees that the chosen actions will be successful, it nonetheless makes choosing more intelligent (Biesta & Burbules, 2003, p.40). The decision-making process becomes conscious, and this means that we can intelligently decide on which actions to test overtly as we learn.

2.1.3 A Learning and Decision-making continuum

In terms of the learning and decision-making processes of trial and error and inquiry, it is worth noting that while Dewey describes these as separate methods, he also stressed that we never truly use one or the other (see e.g. Dewey, 1916/1980, p.163). We can rather conceive of them as opposing sides of a continuum where the varying factor is the amount of thinking intervening in the decision-making and learning processes. They should, however, be understood as something other than equal in educational value. While learning through trial and error can produce new habits and, if followed by a bare minimum of reflection, generate warranted assertions, the knowledge produced is limited to connecting specific actions to specific consequences. However, understanding *why* certain actions result in certain consequences will likely be missed. Such knowledge is more likely produced through hypothesizing the consequences of different actions, followed by overt testing and subsequent reflection (Dewey, 1916/1980, p.157-163).[12] Therefore, learning and decision-making through inquiry is preferable to applying trial and error. This is the case because it makes the decision-making process intelligent, conscious, and deliberate, which is our only means of

[12] Reflection is not the same as all forms of thought, but a special kind of thinking. For more insight see e.g. Dewey, 1910/1997, p.1-13.

freedom (Dewey, 1922b, p.311), and because it increases the potential quality of the learning outcome. Figure 1 illustrates this point.

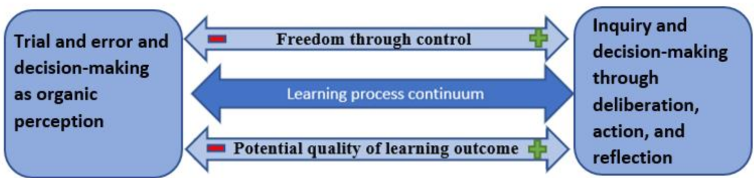

Figure 1. Learning and decision-making continuum

From this perspective, both learning and decision-making *can* be viewed as an individual affair occurring within social and cultural contexts. While Dewey stressed that all our doings occur within social and cultural transactions (Biesta & Burbules, 2003, p.29), both trial and error and inquiry can theoretically happen within a closed room. A single individual can experiment with different lines of action independently, and whether deliberation and reflection are present, learn. This makes individual learning and decision-making a possibility within the human experience. This understanding of learning, however, neither explains the phenomenon of teaching nor learning as a social process. Dimensions that lie at the heart of Dewey's educational theories (e.g. Dewey, 1910/1997, 1916/1980, 1929a, 1938/1997)

2.2 Communication, continuity, interaction, purpose, and decision-making

Communication is fundamental when presenting Dewey's views on learning and decision-making as a social process.[13] While Dewey conceptualized all learning as occurring through experience, communication is how humans can share experiences. He writes: 'Men live in a community in virtue of the things which they have in common; and communication is the way in which they come to possess things in common' (Dewey, 1916/1980, p.5). For Dewey, communication was not simply a transference of information from one mind to another. In line with his transactional position, he saw communication as a process of mutual coordination of action (Dewey, 1929a, p.177-181). In such coordination, language is central, and Dewey broadly defined language. Language refers to; 'not only spoken and written language but also, for example, rituals, ceremonies, monuments and the products of art and technology' (Biesta & Burbules, 2003, p.29). Language is, in essence, everything that has

[13] For more insight into the concept of communication, and how communication is possible within a Deweyan perspective see e.g. *Nature, communication and meaning* in Dewey (1929a)

meaning. In other words, purposefully utilizing communication by means of language is the way students can make decisions and learn as a social enterprise. Dewey's view on language further contributes insight that implies how the material, social, and cultural context convey meaning through language that influences decision-making and learning. This means that through communication, students will not only be able to make decisions based on their own past and present experiences but are able to make decisions where the meanings of a specific context and the past and present experiences of others can contribute to the decision-making processes. Further, as will be made clearer in the following sections, if students take advantage of this opportunity when making decisions, this can, in turn, increase the quality of the decision-making and learning process.

Considering this, it is worth noting that when it came to education, Dewey was not primarily concerned with learning. He saw all experiences as transformative, so the central question for Dewey is not whether learning occurs but rather the quality and direction of the learning (e.g. Dewey, 1938/1997, p.25-26). This is especially relevant when considering that he saw learning as a process that could be both educative and mis-educative (e.g. Dewey, 1938/1997, p.33-36). Furthermore, to discriminate between learning that is educationally worthwhile and learning that is not, Dewey introduced the principles of *continuity* and *interaction*.

The principle of continuity rests upon an idea already presented: That all experience is transformative. More specifically, it is based upon the notion that we, in essence, are our habits. Since every experience in some way modifies our habits, every experience in some way transforms who we are. This results in the quality of every subsequent experience always being affected by our previous experiences since it is a somewhat different person who enters them (Dewey, 1938/1997, p.35). However, a central point for Dewey was that not all learning results in habits that open avenues for broader and richer experiences (Dewey, 1938/1997, p.25-26). Concerning continuity, it is thereby whether the direction of the learning processes occurring opens or closes avenues for further experience that can help us discriminate whether the learning occurring has educational value. The second principle of interaction concerns itself with what Dewey termed the internal and external conditions of a learning situation (Dewey, 1938/1997, p.39-44). Dewey suggests that for any learning situation to have educational value and force, there must be a correspondence between an individual's interests, desires, skills, and knowledge and the objective conditions of a task or problem. For example, suppose a student is assigned to practice dunking a basketball. In that case, this task can only

be educative if the student has the acquired “internal” jumping ability to reach the hoop. It is not that without such internal conditions, the student cannot learn anything. It is rather that without such a match between internal and external conditions, the student can, at best, learn what they cannot yet do and, at worst, acquire habits that make them refrain from ever trying again.

The two principles presented are not meant to be viewed as separate but can be viewed as ‘the longitudinal and lateral aspects of experience’ (Dewey, 1938/1997, p.44). Different situations where there is or is not a match between internal and external conditions succeed one another, and because of continuity, something is always carried over from the former to the latter. If the direction of this continuity opens for richer and wider experiences, we will have a series of potentially educationally worthwhile experiences. If they close avenues and arrest development, for example, by providing students with learning that makes them refrain from ever trying something again, the series of experiences will likely be miseducative (Dewey, 1938/1997, p.44-45). The Concept of communication and the principles of interaction and continuity do, however, have their implications in terms of both teaching and purposefully getting students to participate in educational decision-making.

While Dewey professed that learning occurs when we face indeterminate or problematic situations, he also suggested that we do not have to wait for such situations to arise (Biesta & Burbules, 2003, p.67). Such situations can be constructed, and this is precisely what teaching does. Dewey, however, was adamant that such construction should not be up to the teacher alone. He claimed that it is central that teachers gain ‘the participation of the learner in the formation of the purposes which direct his activities in the learning process’ (Dewey, 1938/1997, p.67). The meaning he ascribes to the process of purpose formation, albeit simplified, is that it is both the construction of an end-in-view and a plan and method for working towards these ends (Dewey, 1938/1997, p.67). For Dewey, developing purposes was a rather complex, partly cognitive, and communicative process involving observation, one’s reflection, communication with others, including those with wider experience, and judgment connecting observations, recollection, and advice to choose why and how to act (Dewey, 1938/1997, p.69). While Dewey stressed student involvement in purpose formation, Dewey urged readers to understand that teacher involvement is also important. Students should be involved because the students know their own capacities, impulses, and desires best.

Teachers, being persons intimately familiar with knowledge of the curriculum, should be involved because they can provide valuable guidance for students (Dewey, 1964). This guidance being productive is, however, according to Dewey, contingent upon teachers being 'intelligently aware of the capacities, needs, and past experiences of those under instruction, and, secondly, to allow the suggestion made to develop into a plan and project by means of the further suggestions contributed and organized into a whole by the members of the group.' (Dewey, 1938/1997, p.71-72). Significantly, just as inquiry cannot help us accurately predict what will happen when solving indeterminate situations, purpose formation cannot guarantee that the learning processes will be educative. Purpose formation can only increase the likelihood of the learning experiences moving us in an educational direction. The decision-making about which direction to take, what to try, and why we do what we do are not purely circumstantial or based on impulse and desire alone. They are directed by intelligent thought and, if applied within a class and group setting, a process of social intelligence (Dewey, 1938/1997, p.71-72).

A central reason for Dewey's insistence upon joint purpose formation can be found in his view of habit. Since habits are the ways and modes we respond to our environment, whether we apply purpose formation when learning in different contexts depends upon us having developed habits for using purpose formation. A central point for Dewey was that teachers should help students learn to apply reflective thinking and purpose formation when learning (Dewey, 1916/1980, p.49). This implies that students should receive some form of formative assessment, some guidance, to help them not only to learn but to learn to learn intelligently and reflectively. According to Dewey, the teacher's central role is, therefore, to help students reach educational goals while at the same time helping them acquire the habit of forming purposes when learning (Dewey, 1964). What Dewey proposes is, thereby, a social process where the teachers and students together develop educational purposes. A process that, in turn, closely resemble principles outlined in different PE assessment for learning and curriculum negotiation literature (e.g. Guadalupe & Curtner-Smith, 2019a; Leirhaug & Annerstedt, 2016). Furthermore, his insights can, in turn, provide guidance that can inform assessment and curriculum negotiation within student learning processes.

Chapter 3: Methodology and Methods

In this chapter, I will present the methodological choices made, the research methods used, and how the analytical work was conducted. Before going into detail about these aspects, the chapter presents possible methodological implications when conducting research inspired by Dewey's pragmatism.

3.1. Dewey's transactional ontology and epistemology

Conducting research with Dewey's work as the theoretical foundation implies that the research builds on a specific ontological and epistemological view. In terms of the ontological view that can be found in Dewey's work, Biesta and Burbules (2003, p.10) suggest that Dewey viewing experience as transactions entails viewing experience as always part of the dynamic everchanging unified process of interacting parts that comprise nature and reality (e.g. Biesta & Burbules, 2003, p.10). Within Dewey's framework, which rejected dualisms such as body-mind and individual-society (Fesmire, 2014, p.73-74; Shusterman, 2008, p.181-183), reality can be viewed as something other than a series of ontological isolated and self-complete entities or events. Instead, it can be considered a continual, unified, ever-changing process.[14] Any new experience is, within such a view, not ontologically a new starting point but rather a change from one experience to another (Dewey, 1896).

Viewing experience as transactions not only implies a certain ontological point of view but also a particular epistemological view (Biesta & Burbules, 2003, p.9-10). Dewey maintained that when experiences are viewed as transactions, experience is not necessarily cognitively known to us (Fesmire, 2014, p.85). Dewey rejected the idea that all experience is a kind of knowing. He instead claimed that; 'we do not have to go to knowledge to obtain an exclusive hold on reality. The world as we experience it is a real world.' (Dewey, 1929b, p. 295). Transaction covers the whole range of human possibilities, and while knowing indeed is a human possibility, it is precisely that, a possibility (Biesta & Burbules, 2003, p. 29). One of Dewey's points is thus that not all experience involves knowledge. Knowledge is, however, not inconsequential or unimportant in his philosophy. He claimed: 'In knowledge, causes become means and effects become consequences, and thereby things have meanings.'

[14] Importantly, Dewey's *'transactional approach'* does not entail the impossibility to make distinctions within transaction, such as between subject and object, between mind and body or between "different experience". It is rather that such distinction must be viewed as functional distinctions within the process, not as metaphysical givens (Biesta & Burbules, 2003, p.26).

(Dewey, 1929b, p.296). Knowledge thereby provides possible foresight of possible consequences of our actions. It enables us to infer what is likely to happen if we act in different ways (Biesta & Burbules, 2003, p.47). Importantly, however, given that reality is considered processual and changing (Biesta & Burbules, 2003, p.9-10), knowledge can never be an infallible or accurate representation of a fixed reality (Biesta & Burbules, 2003, p.85). While knowledge thereby can help us infer the likely consequences of our actions, it can never predict what will happen if we act in certain ways.

According to Biesta and Burbules (2003), a central methodological implication for educational research grounded in the ideas presented above is that the knowledge produced from such research can only identify possible connections between actions and consequences within specific situations that have occurred. It can thus not provide universal laws or truths nor inform us about what to do once and for all. This applies even when the situations investigated are stated to be a representative sample (p.110). Biesta and Burbules (2003) further argue that the knowledge produced can still be of value for both researchers and practitioners alike. Not because it can help perfect educational practice by finding universally better, more sophisticated, or more efficient and effective means of achieving educational ends. Instead, research conducted from a Deweyan perspective enables inquiry into taken-for-granted ideas and purposes. It can allow insights suggesting possible action-consequence connections that *can* make educational decision-making more informed and intelligent (p.109-111). This has consequences for studies building on a Deweyan framework, mine included. It has implications regarding the arguments that can be made and the conclusions that can be drawn from a given study.

Not only can Dewey's ontology and epistemology have consequences for how we understand the product of research, but also for what we consider reliable and valid research. Dewey suggested that research has no unique ability to gain more profound or accurate knowledge than everyday life (Biesta & Burbules, 2003, p.87). He viewed the knowledge produced through research, including research into social dimensions such as education, as fundamentally building on the same principles of inquiry we use in all other areas of our lives (Biesta & Burbules, 2003, p.72-80). Morgan (2014) suggests that from a Deweyan point of view, research is simply a form of inquiry performed more carefully and self-consciously than most other responses to problematic situations. According to researchers such as Biesta and

Burbules (2003) and Morgan (2014), a research process conducted intelligently and reflectively can be viewed as a continual cyclical process containing the five interactive phases illustrated in the figure below.

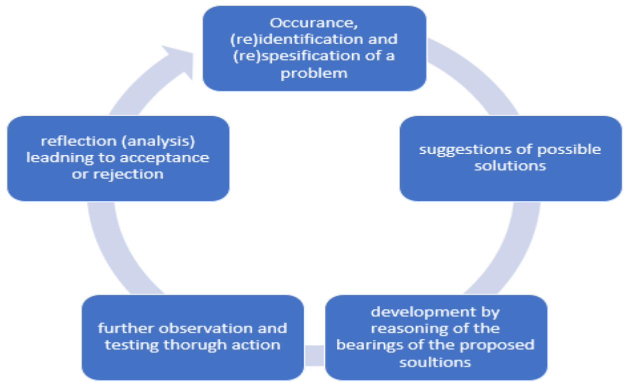

Figure 2. Research-as-inquiry cycle (developed from Dewey's (1910/1997, p.72) steps of inquiry and a model presented by Morgan (2014, p.1048))

Morgan (2014) further suggests that when we conduct research as inquiry, we cannot simply adhere to and follow the methodological rules governing our research realm. This follows from the idea that while established procedures and methods can help us make reflective and intelligent choices, they can only partially provide a way of conducting trustworthy research. Seale et al. (2004) elaborate on this point by suggesting that from a pragmatic perspective, one should be cautious of forcibly applying methods or methodologies to suit a research purpose or context. One should instead test and adapt existing research methods to solve the problem at hand (p.1-11).

In addition to these points, Morgan (2014) also suggests that if research is viewed as a careful and self-conscious inquiry, we must accept that research cannot be a purely rational and disembodied process of logical reasoning. When we meet and identify the problems we want to solve and choose how to solve them, our feelings, ideas, and beliefs will always permeate the decision-making process (Morgan, 2014). Since the decision-making process is permeated by emotions, thoughts, and beliefs, describing methodological choices is important to conduct *trustworthy research* (see e.g. Bryman, 2016, p.44). *Transparency* (see e.g. Burke, 2017) is thus essential to secure trustworthiness within projects building on Dewey's theories.

3.2 Choosing a research-strategy and developing a research-design

As presented above, a Deweyan perspective implies that research can be viewed as a process of inquiry. The first step of research as inquiry, the occurrence, identification, and specification of a problem, is presented in detail in Chapter 1. The next step is to develop suggestions for a possible solution to solve the problems at hand. Bryman (2016, p.32) suggests one place to start can be to choose a research strategy, a concept he uses to refer to qualitative and quantitative approaches (Bryman, 2016, p.32). When choosing the research strategy for this project, I considered the methodological principles outlined above, the project's purpose, and the insights gained through the review. These considerations suggested taking an explorative approach (see Bryman, 2016, p.36) and focusing on micro-level actions and interactions of students to complement current knowledge. Following the recommendations of Bryman (2016, p.401) encouraged me to adopt a qualitative research strategy.

In addition to strategy, a research design is central to any research process. A research design provides a framework for collecting and analyzing data (Bryman, 2016, p.40). Concerning developing a research design, Morgan's (2014) and Seale et al.'s (2004) advice to test and adapt existing research methods was followed, and several insights from the theoretical framework provided guidance. In light of Dewey's suggestion that decision-making involves actions and a varying degree of thinking (e.g. Dewey, 1912, p.663; 1916/1980, p.157-163), it was considered beneficial to apply methods that seemed able to generate insights into student actions and thinking. Following Dewey's transactional understanding of experience (Dewey, 1920, p.86), it was also considered relevant to select methods that could provide information related to the specific context where the thinking and acting occurred. Further, since Dewey emphasizes the teacher's potential to guide and influence student decision-making (Dewey, 1938/1997, p.71-72), choosing research methods that enabled empirical access to teacher actions and thinking was also considered valuable. Following these insights, the research team drew inspiration by looking at several methodological approaches previously developed and used to investigate student learning in PE. The work of Quennerstedt and colleagues (2014; 2011), and the work of Amade-Escot (2005, 2006), included trustworthy and robust research designs using *triangulation* (see e.g. Bryman, 2016, p.386). Within these designs, stimulated recall interviews (SRI's) seemed particularly suited to investigate student decision-making.

SRI’s refer to interviewing individuals by playing audio or audiovisual recordings of their behavior in social situations and discussing aspects of those recorded situations (Dempsey, 2010). By doing this, the method seems able to get empirically close to student and teacher actions and thinking within specific contextual situations. However, given that SRI's use audio or audiovisual recordings, it is dependent upon additional methods to produce such recordings. Using video observations is the proposed solution in the methodologies developed by Quennerstedt et al. (2014) and Amade-Escot (2005). A prerequisite for utilizing video observation to its full potential, however, is determining what situations to focus on (Derry et al., 2010). Quennerstedt et al. (2014) propose pre-lesson interviews with teachers and document analysis to generate insights into what to focus on. Another possibility considered by the research team was to use participatory observations. This method is described as especially suited to creating knowledge about the specific social, cultural, and material contexts and the individuals acting within these contexts (Delamont, 2004; DeWalt & DeWalt, 2011). In line with both the research as an inquiry cycle and the advice of Seale et al. (2004) and Morgan (2014), we decided to test teacher interviews, participatory observation, and video observations through pilots to ascertain if these methods could enable utilizing the potential of SRI’s to investigate student decision-making.

3.2.1 Recruitment of participants

Before any research methods could be tested or applied, participants needed to be recruited for pilots and the main study. The recruitments were conducted in the late summer and fall of 2016. When choosing whom to recruit, several considerations were made. To provide insight into student decision-making relevant to PE in general, we decided to recruit what Bryman (2016, p.62) refers to as exemplifying cases. This entails recruiting participants that presumably epitomize a broader category. Another consideration was Norwegian policy prescribing that students should participate in decision-making relating to assessment (Kunnskapsdepartemetet, 2006, p.33). Grading practices are part of the larger assessment practices in Norwegian education (Baird et al., 2014; Prøitz, 2013) and start at junior high schools (8th-10th grade). This suggested recruiting from junior high schools or higher educational levels. Given that much of previous Norwegian PE literature related to decision-making is written from high school levels in Norway (e.g. Erdvik et al., 2022; Leirhaug & Annerstedt, 2016; Næss et al., 2014; Tangen & Nordahl Husebye, 2019), we decided to recruit from junior high schools to potentially contributing new knowledge to the field of

Norwegian PE research. A strategic selection (Tjora, 2017, p.130) was therefore made to recruit teachers and students from rural and urban schools within junior high schools.

Recruitment for the pilots and the main study was done in accordance with national standards and relevant agencies (see Section 3.4 for detailed insight). E-mails with information and consent letters (see Appendix 2,3, and 4) were sent to principals and teachers to gain permission to conduct research at schools and to recruit teachers. This resulted in three formally qualified teachers being recruited for pilots and two formally qualified teachers being recruited for the main study. In the main study, both teachers identified as male, and one worked in a rural area and the other in an urban area. For the pilots and the main study, students were recruited by visiting the schools of recruited teachers and providing oral and written information (see Appendix 3 and 5) about the project. The pilot recruitment resulted in 47 students in two 10th grade classes being recruited. In the main study, students had the option of consenting to participate in different phases of the project. The students recruited for the main study and their distribution is presented in Table 1.

Recruited 10th grade students form rural school = 23					
Students identifying as male = 9			Students identifying as female = 14		
Participatory observation	Video observation	Stimulated recall interviews	Participatory observation	Video observation	Stimulated recall interviews
9	8	3	14	12	8
Recruited 8th grade students from urban school = 29					
Students identifying as male = 13			Students identifying as female = 16		
Participatory observation	Video observation	Stimulated recall interviews	Participatory observation	Video observation	Stimulated recall interviews
13	13	9	16	15	10

Table 1. Distribution of students in the main study.

3.2.2 Implementation and analysis of pilots

The first pilot conducted consisted of in-depth interviews (Tjora, 2017, p.113-122) with two teachers in late August 2016. Before the interviews, an interview guide was made (see Appendix 6). The interviews were conducted at the teachers' schools, were audio recorded, and lasted approximately 1 hour each. The interview consisted of questions concerning the teachers' understanding of the term's student participation, as defined in the

national curriculum LK06, and how the teachers involve students in decision-making processes in different parts of their teaching. After the interviews, the audio recordings were transcribed.

In early September 2016, a second pilot of participatory observations (Delamont, 2004; DeWalt & DeWalt, 2011) was conducted in two 10th-grade PE classes at one junior high school. An observation guide was developed before the participatory observations started (see Appendix 7). In terms of how the participatory observations were conducted, different "roles" were tested to get empirically close to student decision-making. The observations consisted of me observing ordinary PE classes as an assistant teacher in one lesson and as a peer student in another. During the observations, I noted keywords based on the observation guide and tried to capture short dialogs in a field journal. Immediately after each observation, detailed field notes were written down.

After the first two pilots, interview transcripts and field notes were analyzed through a process resembling the first step of the thematic analysis described by Braun and Clarke (2006). I immersed myself in the data by reading and re-reading the text and taking notes about possible patterns. When taking notes, I initially had a semantic focus (Braun & Clarke, 2006), but also searched for latent meanings (Braun & Clarke, 2006). Concepts and ideas from the literature review and Deweyan literature helped inform possible latent themes.

The third pilot conducted consisted of testing video analysis in September 2016. I searched YouTube for different videos of PE practice and selected one video concerning assessment within Swedish PE containing recordings of different situations within PE practice.[15] The video was viewed and reviewed, and situations related to student decision-making were identified and written down with the time stamp in the video. Thoughts about episodes related to student decision-making made up the central part of the notes taken. A second analysis phase followed, where the research team viewed the video and discussed what we saw. We gave special attention to the episodes already identified but also identified and considered situations that had not yet been recognized or noted.

[15] The video can be located at: https://www.youtube.com/watch?v=aWrGeOytrt0

After the pilots, the research team conducted a final summary analysis through reflexive dialogs (Braun & Clarke, 2006). Focusing on the strengths and limitations of the research methods tested, we concluded that: (1) Deweyan theory seemed applicable as a theoretical framework for investigating student decision-making; (2) Participatory observations seemed more suited than teacher interviews to generating contextualized and situation-specific empirical material to inform video observations; (3) If informed by participatory observations, video observations seemed applicable to generate video recordings for SRI's; (4) It would be possible to conduct SRI's to investigate student decision-making, and; (5) A research design aiming at investigating student decision-making using a Deweyan framework should include phases of analysis throughout the design. This is to be able to adapt each method step according to the insights produced through the preceding method.

3.3 The research design.

Following the conclusions drawn after conducting the pilots, the research team decided upon the research design illustrated in Figure 3 to investigate student decision-making in PE. The design consists of seven steps, each described in detail in the following sections that present how the design was implemented in two Norwegian PE classes

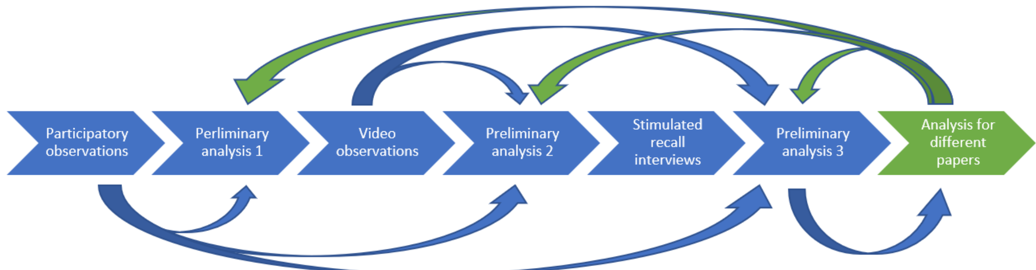

Figure 3. Research design

3.3.1 Step 1: Participatory observations

The first step of the design, participatory observations, is described as particularly suited to generate knowledge about specific social, cultural, and material contexts, as well as the individuals acting within these contexts (DeWalt & DeWalt, 2011). It does this by providing researchers with the opportunity to experience, reflect upon, and pose questions about ongoing practices within their natural context (Delamont, 2004). In the design, the method is intended to uphold four primary purposes. These are: (a) To familiarize the

researcher(s) with the specific contexts and the participants within; (b) To enable planning for video observations; (c) To gather material that can inform how it looks when students find themselves in indeterminate or problematic situations, and; (d) To gather empirical material to make it possible to discuss whether the introduction of video cameras in step 3 influence the context and participant actions.

Data collection started in October 2016 with four weeks of observations, where I observed one 90-minute PE lesson each week in each school. As outlined in Section 3.2, the underlying Deweyan framework suggests that investigations into student decision-making should gather material about student and teacher actions and thinking, as well as about the specific context (e.g. Dewey, 1912, p.663; 1920, p.86; 1938/1997, p.71-72). Therefore, I decided to observe the lessons by alternating between different roles. I participated as an assistant teacher, as a peer student, and as an observing researcher. By changing between these roles, I extended the possible experiences and types of interactions I had with participants, thereby extending the knowledge I could develop. The roles were shifted by agreements made with both teachers before the observed lessons. In addition to my observing, a second researcher observed one of the lessons in each class from the sidelines. Within the observation period, detailed field notes were taken during and immediately after each observed lesson in a field journal I carried with me throughout the observation period.

3.3.2 Step 2: Preliminary analysis of field notes

After participatory observations, the design's next step is to conduct preliminary analyses of the field notes. This is mainly done to plan for upcoming steps in the design. The analysis consisted of immersing myself in the data by reading and re-reading field notes and noting possible patterns (Braun & Clarke, 2006). When taking notes, I searched for semantic patterns and latent meanings (Braun & Clarke, 2006). Concepts and ideas within Dewey's theoretical framework and insights from the review helped inform the analysis. The ideas developed through this first analysis stage were then discussed with the second researcher. We concluded that the observation period had adequately upheld the purpose of familiarizing me with the specific contexts, the students, and the teachers. In addition, the observations provided insight into where I could place cameras and audio devices to follow guidelines for video observations (Derry et al., 2010; Quennerstedt et al., 2014). We also concluded that the field notes could serve as a foundation for discussing possible behavioral changes occurring

when the lesson was to be video recorded. Finally, the analysis indicated that we could develop general characteristics of four situations where students make decisions. From Dewey's theory, we had the conceptualization that when students experience indeterminateness or problematic situations, they are in situations where they make decisions (e.g. Dewey, 1912, p.663). From the field notes, we further hypothesized that such situations seemed to be characterized by: (a) The students seeming hesitant or struggling to manage a task on their own and; (b) Students discussing or negotiating what to do within groups. We also recognized that while I had familiarized myself with the students, the teacher knew the students far better than me. We, therefore, hypothesized that another indication of students experiencing indeterminate or problematic situations was: (c) The teacher providing feedback one to one, and; (d) The teacher providing feedback to a group.

3.3.3 Step 3: Video observations

The third step of the research design is to conduct video observations. A strength often described with this method is its ability to let researchers observe several situations occurring at the same time, to see the same situations repeatedly (Quennerstedt et al., 2014), and for several viewers to 'reach agreement on major events, transitions, and themes' (Derry et al., 2010, p.9). Within the design, the overall aim is to capture all the actions and interactions of students and teachers in each PE setting so that situations where students and teachers possibly make decisions are recorded for analysis and use as audiovisual stimuli in SRI's.

The video observations took place in December 2016, and one 90-minute lesson was video recorded in each class. Two stationary cameras on tripods with sensitive microphones were placed in diagonally opposite corners of the gym to capture all the actions occurring. A third portable camera with a directional microphone was used to zoom in on selected situations during the lesson. The four characteristics developed in the analysis of the field notes (see Section 3.3.2) were used to determine situations to focus on with the portable camera. In addition to the three cameras with microphones, a fourth microphone was placed on the teacher to capture the oral interactions between students and the teacher. This resulted in video material from three angles and audio material from four sources being gathered for further analysis and potential use in the following SRI's.

3.3.4 Step 4: Preliminary video analysis

The fourth step of the research design is to conduct a preliminary analysis of the video material. Immediately following the video observations, video analyses were conducted to identify situations to use in the SRI's (Dempsey, 2010). While SRI's use audio or audiovisual recordings to 'jog memories' of participants (Dempsey, 2010, p. 350), they rely on participants' memories. The research team, therefore, decided to keep this preliminary analysis process as short as possible while at the same time being thorough. This is one reason for video observing only one lesson in each class.

The analysis started with editing the different camera angles and audio sources into one coherent lesson, following each teacher, using Adobe Premier Pro software. These edits were then viewed and re-viewed to identify situations where the teachers interacted with students and where students seemed to experience indeterminate or problematic situations without the teacher participating. The first part of the analysis can be viewed as an immersion into the material (Braun & Clarke, 2006). This was followed by co-viewing and discussing the two edits with the second researcher. The discussions departed from the notes developed through the immersion process but also consisted of identifying additional situations. Through this process, we identified which students to interview by looking for students involved in all four situations of interest (see Section 3.3.2), which situations to use in the teacher SRI's, and discussed whether the introduction of video cameras appeared to alter the behavior of students and teachers. We concluded that we could not identify situations to suggest alterations to behavior apart from at the beginning of each lesson when students were waving or making funny faces at the cameras.

After the above analysis, new video edits for selected students using the camera and audio "angle" that best captured their actions were developed. To keep the timeframe between the video observations and the following SRI's as short as possible, 16 edits were made about potential candidates (eight students in the 10th grade and eight students in the 8th grade). All new edits were viewed with the specific task of identifying and selecting situations to be used as stimuli in student SRI's. While many of the situations chosen were previously identified, several new situations were located through this process. In the end, 5-8 situations for each student were selected. In sum, the preliminary video analysis closely resembles a part-to-whole deductive approach to video analysis (Derry et al., 2010).

3.3.5 Step 5: Stimulated recall interviews

The fifth step of the research design is to conduct stimulated recall interviews (SRI's) (Dempsey, 2010). From the theoretical framework and the reflections following the pilots, a key insight was that generating empirical material only about student actions was considered insufficient for investigating student decision-making. From a Deweyan perspective, decision-making also involves thinking, or lack thereof, within specific situations (e.g. Dewey, 1910/1997, p.72; Dewey, 1916/1980, p.157). The reason for choosing to use SRI's as part of the research design is that the method was considered suitable for getting empirically close to the teacher and students' thinking in close connection to specific actions and situations (see e.g. Amade-Escot, 2005; Quennerstedt et al., 2014).

Before the SRI's started, interview guides (see Appendix 8 and 9) were developed. The interviews were conducted within two weeks of the video observations. All 16 potential students identified in the video analysis were asked to participate. While all had previously consented in writing, three students declared they had changed their minds when invited orally to participate. This resulted in two students identifying as male and four as female from the 10th grade, three as male and four as female from the 8th grade, and both teachers being interviewed. The interviews consisted of asking general questions about student involvement in educational decision-making and playing the participant's audiovisual recordings, followed by discussing aspects of those recorded situations (Dempsey, 2010). Of particular interest was student and teacher thinking regarding the decision-making processes they were potentially involved in. All interviews were audio recorded.

3.3.6 Step 6: Inductive thematic analysis

The sixth step of the research design is conducting an inductive analysis of all the material gathered through a thematic analysis focusing on emerging data (see e.g. Braun & Clarke, 2006). The analysis followed the six-stage framework presented by Braun and Clarke (2006). This analytical approach was chosen because it is not directly tied to any particular theoretical framework, and thereby 'provides a flexible and useful research tool, which can potentially provide a rich and detailed, yet complex, account of data.' (Braun & Clarke, 2006, p.78) The primary purpose of the inductive analysis was to create an empirically-close thematic map of the gathered material (see e.g.Tjora, 2017, p.197). The analysis process started by transcribing all the audio-recorded interview data and the video from the SRI's.

Choosing to do the transcribing myself is something Braun and Clarke (2006) suggest to be a good starting point for immersion into the material gathered. Through transcription, I re-familiarized myself with the material and noted possible codes, themes, and patterns. After transcribing, I continued by reading and re-reading the transcripts and field notes. As Braun and Clarke (2006) suggest, while this is time-consuming, this phase provides 'the bedrock for the rest of the analysis' (p.87). This was followed by conducting reflexive dialogs (Braun & Clarke, 2006) with the second researcher, and we discussed ideas for codes and themes. The total amount of material included in the inductive thematic analysis can be viewed in Table 4.

Research method applied	Type of data	Amount of data
Participatory observations	Detailed field notes	Ca. 17 pages
Video observation	Selected video segments	Ca. 3 hours
Stimulated recall Interviews with teachers and students	Interview and selected video segment transcriptions	Ca. 213 pages

Table 2: Data material analyzed.

The next step suggested by Braun and Clarke (2006) consists of coding. When coding, I took a semantic approach and, inspired by Tjora (2017, p.197), applied inductive empirically-close coding. To do this, Tjora (2017, p.203) proposes asking two central questions for each new code: (1) Could the code be generated before the coding process? If yes, make a new code; if no, possibly a good code, move to question 2. (2) What does just the code inform us about? If it thematizes the data segment, it is an unnecessary sorting code. It's a good and appropriate code if it reflects specific content from the data segment. In Table 5, you will find an example of a code made in this process.

Student interview extract	**Initial Code:**
Researcher: Well, you say that you all felt that the task was a bit strange… **Student:** (interrupts) Well, a bit cheesy. **Researcher:** A bit cheesy, ok, to jump around or… What do you mean by cheesy? **Student:** That it was embarrassing! **Researcher:** Ok. What do you think about it now? **Student:** No, now most of them have forgotten it.	The student feels embarrassed when performing a skip jump in class.

Table 3. Example of coding

The coding was conducted with the software program MaxQDA, a computer program for arranging extensive interview texts. Using this software program, all codes were linked to their extract point in the original transcription. This was done to avoid losing the context of each code, which, according to Braun and Clarke (2006), is one central point of criticism of some forms of thematic analysis. In addition, not losing the context of each code enabled moving back to the context of each code created to search for latent themes in subsequent analysis.

As suggested by Braun and Clarke (2006), after coding, the codes were systematized into themes. I continued using the analysis software, which enabled the inclusion of different codes to several themes. Finding the themes was an iterative and dynamic process focusing on emerging data and initially consisting of grouping codes that seemed semantically similar. For example, the exemplified code above (table 5) was first put into a theme labeled "Students experiencing negative emotions". This theme was later included in a bigger theme called "Student emotional responses in the lessons". However, during thematization, I moved from a purely semantic focus to also searching for latent themes. For example, many of the codes included in the semantic theme "Students experiencing negative emotions" were eventually included in the latent theme "Emotional responses when making decisions". When doing this thematic restructuring, I revisited the context of individual codes each time I created a new overarching theme and looked to the code's context to decide if the code was to be part of a new overarching theme. At the different "levels" of themes, I also created a theme labeled "discarded codes". This strategy ensured I had an overview of the material "lost" at each new overarching level. After creating an initial thematic map, as suggested by (Braun & Clarke, 2006), I reviewed the themes in relation to the original empirical material. I read both the SRI transcripts and the field notes and viewed the teacher video edits anew. When doing this, the different discarded code folders helped me get an overview of what I had sorted out. In this process, I focused on determining if the original material contained dimensions of student participation in decision-making that needed to be represented in the final thematic structure.

3.3.7 Step 7: Deductive analysis for different articles

The seventh and final step of the research design is to conduct specific deductive analyses (see e.g. Braun & Clarke, 2006). The thematic structure developed during the inductive analysis serves as a starting point for conducting these subsequent analyses addressing specific research questions. The analysis process for the articles in this dissertation

started with the research team viewing the teacher video edits for each article. We did this because, while we had the thematic map, we wanted to approach the data openly and discuss the edits to re-develop major themes and structures we could see. This had the purpose of re-immersion but also for choosing what to focus on in each article through reflexive dialogs.

After choosing the focus of each article, the analysis process continued by applying a deductive approach to thematic analysis (see Braun & Clarke, 2006). This approach consisted of connecting the themes identified through the inductive analysis with different theoretical ideas, conceptualizations, and previous PE research identified in the review. Dewey's pragmatism served as the primary theoretical lens through which I identified, reorganized, and re-named themes. However, the formative assessment framework developed by Black and Wiliam (2009) was also applied in Article 2. Apart from having a deductive approach when recoding, relabeling, and reconstructing themes, as well as moving from primarily having a semantic focus to primarily having a latent focus (Braun & Clarke, 2006), the analysis process was conducted similarly to the one describing the phases of inductive analysis in Section 3.3.6.

3.4 Ethical considerations

The research project was reported and pre-approved before recruitment began by the Norwegian Center for Research Data (NSD) in December 2015 (see Appendix 10). In the Norwegian context, NSD is the central institution that pre-approves research projects that do not specifically investigate health-related topics or store medical data. To get the project pre-approved, I had to submit the research project's purpose, present the intended recruitment strategy and participants, a detailed plan for safely storing the material gathered, and the method steps chosen to conduct my research. While the choice of participatory observations, video observations, and interviews was formed early in the project, and I applied to NSD intending to use these research methods, the methodology developed during the project. As a result, I frequently contacted NSD throughout the project to ensure that changes to the methodology, plans for storing data, and how to conduct anonymization were ethically and legally sound. This contact culminated in a last submission for a change approved on 14.02.2020 (see Appendix 11). While NSD provided guidance, some ethical considerations became central to this project. Two of these are presented below, and these are the two considerations viewed as the most challenging within the project.

3.4.1 Gaining informed and voluntary consent

How to ensure voluntary informed consent has been a central ethical consideration in this project. To ensure informed consent, all participants were provided with detailed information and a consent letter about the purpose and content of the research project (Appendix 2,3,4 and 5). In addition, all participatory observations conducted, as well as all the interviews, started with providing both the teachers and the students with oral information. I reminded teachers and students of my obligation to confidentiality, anonymization, and the possibility for the participants to withdraw at any time without providing a reason. I also told teachers and students they could ask me questions if anything needed clarification. Since only two teachers participated in the main research design, explaining how this could affect anonymization was essential. Both teachers replied that anonymization was unimportant for them. Still, I told them I would anonymize using pseudonyms and that only their gender, teacher experience, the class level they taught, and whether they worked at an urban or rural school would be presented.

When getting written consent from students, there was a difference between the pilots and the main research design. In the pilots, all the students recruited were over the age of 15. By Norwegian consent guidelines (NSD, n.d.) and correspondence with NSD, it was decided that these students could provide written consent to participate without co-consent from their legal guardians. In the main study, however, due to video observations, NSD concluded that all students needed consent from their legal guardians to participate. Ultimately, all pilot and main project participants provided written consent before data collection began.

While ensuring informed consent might seem unproblematic, when I started reflecting on how to ensure voluntary consent, there were challenges. The challenge I faced was related to a point made by McNamee et al. (2006, p.76-77), who suggest that to uphold the notion of voluntariness concerning informed consent, researchers need to be aware that duress, undue or unacceptable inducements, and pressures may influence participant voluntariness. This point created a challenge in this project because utilizing video observation of whole class settings means that students not consenting to participate could not participate in recorded lessons. To uphold Norwegian regulations regarding the right and duty to attend compulsory education, these students needed to be presented with alternative lessons in the period designated for video observation. In this research project, this was solved by the student's

teachers offering the students alternative lessons in their parallel classes. While this was done to ensure that the students would have a 'normal' alternative to participation in the project, this does not remove the possibility of some students experiencing duress or pressure. For some, not having PE with their regular class might be experienced as problematic and induce pressure to participate to have PE with their regular class. The possibility of students perceiving alternative lessons as causing duress or pressure, no matter the reason, resulted in me choosing to minimize the duration of the video observation periods. The reason for only conducting one video-observed lesson in each class is thus not only to keep the video material manageable for the SRI's, but there is also an ethical reason. The video observations are kept as short as possible to minimize the potential duress and pressure felt to participate in the research.

3.4.2 Confidentiality, anonymity, and verifiability

Concerning the ethical principles of confidentiality and verifiability, Fangen (2004) suggests that within research projects, these principles can conflict with each other. When this occurs, there is a need to balance confidentiality with verifiability. When doing such balancing, Fangen (2004) suggests that upholding the principle of confidentiality should outweigh upholding verifiability. In this project, anonymization was maintained using pseudonyms in the material gathered, articles, and final report. In terms of confidentiality, all material gathered has been locked in a safe whenever not used, and video and audio recordings were stored on an encrypted, password-protected external hard drive and locked in a safe whenever not in use. Video and audio recordings were analyzed on a computer not connected to the internet. However, I faced a challenge when NSD deemed it prudent to delete the audio and video material after the final analysis because I wanted to keep this data for verification. In the end, and following correspondence with NSD, all the video and audio material was deleted after the final analysis for Article 3 because of its highly identifiable nature. However, I got approval to store all the anonymized transcripts and the signed consent forms for verifiability reasons. The Norwegian School of Sport Sciences now keeps this information per internal procedures for safe storage and will store it for verification until the end of 2025.

Chapter 4: Findings

This chapter presents a summary of the main arguments and findings presented in three articles developed within the project. The full articles are submitted as attachments in the dissertation. I suggest reading them for anyone interested in nuanced and detailed insights into each article's possible contribution toward understanding student decision-making in PE.

4.1 Summary of Article 1.

Aarskog, E., Barker, D., & Borgen, J. S. (2018). *What were you thinking? A methodological approach for exploring decision-making and learning in physical education*. Sport, Education and Society, 1-13.

The broad purpose of the article is to propose a methodology developed specifically to investigate individual student decision-making within individual student learning processes in PE. Inspired by Dewey's ideas concerning habit (Dewey, 1938/1997, p.35), knowledge (Dewey, 1929b, p.296), and the related learning processes of trial and error (Dewey, 1916/1980, p.157), and reflective experience (Dewey, 1916/1980, p.157-163), the conceptualization of decision-making applied in this article relates to how students 'choose' to respond to indeterminate or problematic situations when learning (see e.g. Dewey, 1912, p.663; Dewey, 1916/1980, p.157-163). With reference to selected parts of Dewey's theory, this process of choosing is presented as a process that primarily is behavioral (Biesta & Burbules, 2003, p.35-36), and while it can include cognition, it is argued that it can also be a subconscious process of organic perception (Dewey, 1912, p.663). A central point in the conceptualization is, however, that the quality of the decision-making and learning increases when thinking intervenes (see e.g. Dewey, 1916/1980, p.158; 1922b, p.190).

From this conceptualization, several methodological principles are outlined. It is proposed that it is not *if* students make decisions when learning in PE that is pedagogically essential but rather *what* and *how*. Further, it is suggested that studies aiming to investigate either the what or the how of decision-making should be able to consider both. It is further proposed that when learning is viewed as a process of decision-making involving actions and a varying degree of thinking, there is a need to generate material concerning student actions and thinking. However, this is still not enough if one considers all decision-making as influenced by the specific social, cultural, and material contexts in which they are formed. It is therefore proposed that gathering material concerning the context is also crucial.

To follow the principles outlined, the article describes a three-step research design to get empirically close to individual student decision-making. These steps are participatory observations, video observation, and stimulated recall interviews. After providing a suggested way to implement these steps, similar to the description in Chapter 3 (Section 3.3), the article presents an analysis of a situation identified in empirical material gathered in the Norwegian PE context. From this example, it is suggested that the methodology allows researchers to develop a picture of the decision-making processes of students in PE. The article further highlights three ways such insights can complement or extend existing research.

First, it is suggested that the methodology presented can provide insights into what motivates or engages students and how motivation and engagement can change over time. It is argued that this may be useful for educators and scholars interested in student engagement (e.g. Brooker & Macdonald, 1999; Enright & O'Sullivan, 2010; Howley & Tannehill, 2014; Mitchell et al., 2015). Secondly, it is suggested that the methodology provides a useful way for scholars to understand student thinking and their responses to certain stimuli. This is a key aspect of models such as Teaching Games for Understanding (Light et al., 2014; Ian Renshaw et al., 2010), and accordingly, the methodology could be a useful tool for those interested in game sense. Thirdly, it is suggested that the methodology can have implications for discussions of teaching styles (Mosston & Ashworth, 2002). It is argued that insights produced through the methodology challenge the idea that teachers can ever make all the decisions in a classroom. While if viewed from a social perspective, with decision-making being understood as forms of social negotiations, a teacher may appear to make most of the decisions, from a methodological perspective that focuses on the individual, students are often involved in decision-making. This is because indeterminate situations emerge whether the teacher wants them to or not. In any given learning activity, then, one would expect to see many different decisions made by students depending on their experiential backgrounds.

In sum, the article contends that some of the potential of the proposed methodology lies in its ability to provide insights into: (1) The learner's understanding of the task and context; (2) Identifying when the learners hesitate, what options they recognize, and what logics and rationales they apply when choosing, and; (3) The myriad of decisions that are being made in any given situation.

4.2 Summary of Article 2.

Aarskog, E. (2021). *'No assessment, no learning': exploring student participation in assessment in Norwegian physical education (PE*). Sport, Education and Society, 26(8), 875-888.

The article explores how students participate in assessment processes in Norwegian PE. It departs with a brief review of PE assessment literature, arguing that international and Norwegian PE assessment literature tends to be teacher-centered (see e.g. Hay, 2006). Further, while examples of literature that take a student-centered approach exist (e.g. Hastie et al., 2012; Peneva & Karapetrova, 2013; Potdevin et al., 2018), such literature tends to present specific assessment tools or techniques for students to apply, while subsuming a need for teachers to initiate such strategies. The article summarizes previous literature by suggesting that research focusing on the assessments made by students in PE is scarce and that further explorations into student assessment practices could be beneficial. Following this line of thought, the pose the research question: *How do students participate in assessment processes that occur in Norwegian PE?*

To address the research question, the article draws on assessment theory and selected parts of Dewey's theories. Inspired by the three key processes presented by Ramaprasad (1983) and the definition of formative practice provided by Black and Wiliam (2009), it is suggested that educational assessment is any process where teachers, learners, or their peers elicit, interpret, and use the information to ascertain; where the students are in their learning, where they are going in their learning, how best to get there, or any combination of the three. For this conceptualization to be applicable for methodological and analytical purposes, it is further suggested that the Deweyan perspective holds insights that can contribute. It is proposed that it is possible to view Dewey's concept of perception (Dewey, 1896, 1912) as one form of assessment and the cyclical process of making hypotheses, testing these, followed by reflection (Dewey, 1910/1997, p.72) as another. Further, Dewey's ideas concerning communication and the social dimension of learning (e.g. Biesta & Burbules, 2003, p.41-42; Dewey, 1916/1980, p.5) is suggested as a possible framework for understanding how assessment can be performed as individual and social processes. Following this framing, a central argument presented is that assessment can and will occur whenever students experience indeterminateness or face problematic situations.

The method steps proposed in the article to investigate and analyze material related to assessment is the design described in Section 3.3 of this dissertation. The findings in the article are presented under three main headings: (1) Participation in establishing where the learners are in their learning; (2) Participation in ascertaining where the learners are going, and; (3) Participation in establishing how best to get where they are going.

Under the first heading, the results presented indicate teachers and students most commonly associate the term assessment with establishing what students know or can do and often use it synonymously with grading practices. Further, in line with previous assessment literature (e.g. Leirhaug & Annerstedt, 2016), the teachers seldom seem to share learning goals at the start of lessons, nor do they actively initiate systematic self- or peer-assessment strategies. Despite this lack, the results indicate that the students do elicit and interpret information about where they are in their learning in relation to specific tasks. They also report that they have clear ideas about whether a given task is something they already know how to do and whether they managed tasks. Further, students appear to participate in establishing where they are in their learning by analyzing teacher comments, comparing themselves with peers, and through their feelings and impressions.

Concerning assessment undertaken to ascertain where the learners are going, some findings align with previous literature (e.g. Redelius et al., 2015). The teachers rarely direct student attention towards learning but instead, focus on what students are supposed to do and student effort. Another similarity is that students have vague ideas about what they are supposed to learn in PE when asked directly. Despite this, it is argued that the students do participate in ascertaining where they are going in their learning. This claim is based upon the idea that establishing where one is going when learning is not necessarily equal to being able to describe what one is supposed to learn in PE. Following the selected ideas of Dewey (Dewey, 1938, p.108-112), it is suggested that establishing where one is going can occur as part of transforming indeterminate situations into problematic ones. A transformation where we develop ideas about the nature of problems and their hypothetical solutions. Concerning this, a central finding is that the students seem to develop quite clear ideas about the problems they face, what they can try, and what they need to be able to do to solve specific problems. While the ideas primarily reflect what the teacher told them to do when assigning tasks, the analysis

shows that students participate by clarifying the task or developing additional ideas framing the problems they face. A central argument made is that while student ideas may not always coincide with what the teacher intends them to learn, they do participate in establishing where they are going in their learning.

Concerning assessment as establishing how best to get where they are going, the analysis suggests that students apply several strategies. One strategy is to try to copy the teacher's proposed solutions. This commonly occurs when teachers try to help students understand the problems by showing and telling students what to do and how to do it. An argument made is that this, in turn, rarely seems to initiate reflective processes concerning how best to get where they are going. When the teachers are not involved, however, student self-reflection, hypothesizing, and discussions on how to solve different tasks are more prominent. It is, thus, first and foremost, when the teachers step away, that students seem to participate in reflective assessment processes. Notably, both participating teachers encouraged and created a space for students to reflect and negotiate between themselves. While not often actively initiating or guiding reflective processes, the teachers do provide room for such assessment practices.

The article concludes by suggesting that while the teachers use few deliberate strategies to involve students in the assessment processes, students participate in all three key assessment dimensions. It is further proposed that this insight should not be ignored since it reveals significant potential. There is a potential for teachers and researchers to shift their focus from initiating and involving students in assessment to focusing on how to engage and guide students into using reflective assessment processes when learning.

4.3 Summary of Article 3.

Aarskog, E., Barker, D., & Borgen, J. S. (2022). *'When it's something that you want to do' Exploring curriculum negotiation in Norwegian PE*. Physical Education and Sport Pedagogy, 27(6), 640-653.

This article aims to explore student participation in curriculum negotiation in Norwegian PE. In light of previous PE literature suggesting that students seem to have limited opportunities to make curricular decisions within PE (e.g. Enright & O'Sullivan, 2010; Moen et al., 2018), it is suggested that a Dewey-inspired framing of curriculum negotiation can represent a perspective that might provide different insights. The article follows this suggestion by presenting Dewey's views on learning through solving indeterminate and problematic situations (see e.g.Dewey, 1910/1997, p.72; Dewey, 1916/1980, p.164), the principles of interaction and continuity (Dewey, 1938/1997, p.34-44), and Dewey's conceptualization of purpose formation (Dewey, 1938/1997, p.67). It is argued that this theoretical framing relates to curriculum negotiation in several ways.

It is proposed that from this theory, we can infer that: (1) Different learners will have differing impulses and desires, and one individual can have several impulses and desires simultaneously. These possibilities suggest that most educational contexts contain multiple and conflicting impulses, desires, and purposes and, therefore, multiple and conflicting actions; (2) Curriculum negotiation can be understood as a process arising when students and teachers act upon differing impulses, desires, or purposes; (3) Every negotiation process should be considered a potential learning experiences; (4) Within school contexts, where consequences of acting in specific ways include reactions from peers and teachers in terms of the appropriateness of the actions made, curriculum negotiation can potentially lead to learning what is acceptable behavior within a given social context; (5) Curriculum negotiation can positively impact learning in at least two ways. It can help facilitate a match between internal and external conditions of learning situations, and it can help students acquire habits of utilizing purpose formation as part of their learning processes, and; (6) Although many of the actions taking place during PE lessons are explicit (e.g. verbal suggestions, explanations or appeals), curriculum negotiation does not necessarily need to be verbal or explicit. Even implicit actions taken by students and teachers can be understood as negotiation forms if differing desires and purposes exist within the context.

In the wake of the presented theoretical framing, it is argued that to investigate curriculum negotiation, it would be beneficial to apply a methodology that can generate insight into teacher and student impulses, desires, purposes, and actions, as well as information about the context. The methodology presented in Chapter 3 is suggested as a possible solution, and the implementation of the methodology is presented in Section 3.3. In terms of the findings, the article presents these under two main headings.

Under the heading 'Explicit curriculum negotiations', the article shows how both teachers in the study describe explicit curriculum negotiation as an important dimension of pedagogy. At the same time, the teachers admit that they do most of the planning and decision-making for their teaching practices. For their part, students report perceiving this as 'normal' in PE. Despite this tendency, the study identified multiple examples of explicit curriculum negotiation, such as suggesting alternative activities, ways of solving tasks, and how to divide the class into teams and groups, and both teachers and students reported these forms of curriculum negotiation as common within PE. In addition to these common forms of explicit negotiations, the 10th-grade teacher reports facilitating democratic choices of activities by involving students in 'voting' processes concerning which activities to have in PE. The 8th-grade teacher reported that he facilitates projects and student-driven lessons where students discuss and negotiate what and how to have PE. The article, however, suggests that while students thereby seem to participate in different forms of explicit curriculum negotiations, the teachers rarely seem to use these negotiations as opportunities to help students negotiate in relation to the national curriculum or what to learn. From a Deweyan perspective (e.g. Dewey, 1938/1997, p.69-72), it is argued that the teachers thereby miss educational potentials that can lie in including students in teacher-guided mutual reflective processes framing the purposes that guide student learning.

Under the heading of 'Implicit curriculum negotiation', the article claims that implicit negotiations are far more prominent than explicit negotiations in the material analyzed. Three examples where student actions can be viewed as forms of implicit curriculum negotiation are presented to illustrate central insights produced through the analysis. The first example relates to a situation where students fool around while conducting group work. In the example, the teacher starts the lesson by explaining that fooling around can negatively impact student grades, but he never actively discourages students from fooling around throughout the lesson.

He instead encourages them to keep focus on the tasks provided. He reports doing this both because he believes positive feedback to be better than negative and to minimize off-task behavior, which he views as disruptive to student learning. The implicit negotiation identified is constituted by students acting out their impulses and desires to socialize and have fun and the teacher's purposeful encouragement to keep the focus on tasks. It is suggested that the teacher accepts the implicit negotiation occurring and, knowing or unknowingly, utilizes these negotiations to keep off-task behavior at an acceptable level. A key insight presented is that the students perceived opportunities to engage in off-task behaviors, socialize, and have fun as important for their well-being and learning in PE. However, the students' views remain hidden from the teacher by staying implicit. At the same time, the teacher's view that minimizing off-task behavior is important for student learning seems hidden from the students. The central claim in the article concerning this example is that by being implicit, the negotiation conceals aspects of the teaching-learning process from the different actors.

The second example concerns students negotiating by adapting tasks to their abilities. This form of negotiation is argued to be common, and the article presents that students negotiate by making tasks easier or harder to suit their own abilities and skill levels. A central claim made in relation to such negotiations is that the teachers observed rarely address student adaptations of tasks explicitly. Adaptation occurs as students try to match internal and external conditions (see e.g. Dewey, 1938/1997, p.39-44). When the teachers provide feedback to students making adaptations, these are often either positive or correctional, depending upon teacher perceptions of the adaptation's appropriateness. While some feedback is explicit, the negotiation constituted by students choosing to adapt tasks and the teacher's reflections, resulting in either positive or correctional feedback, remained implicit. The central claim made in the article concerning such negotiations is that they represent instances where guidance into the reflective processes of the students could be beneficial. The argument is that such help and guidance could provide students with valuable insights for adapting tasks in the future. Further, it could help students acquire habits of thinking that are beneficial when developing and re-developing purposes guiding further learning.

The third example of implicit negotiation relates to how students can negotiate by displaying different bodily positions. Contrary to the other forms of implicit curriculum negotiation presented in the article, this example represents how keeping the negotiation implicit seems

beneficial. The example describes a student who, through her bodily positioning, standing silent, looking down, and covering her face with her hair, conveys that she does not want to participate or be noticed. When the teacher was interviewed about this situation, he explained that while he saw her, she is a student that he intentionally does not confront when she does not want to do something because this will only result in her not showing up for PE. As he explained, it is better that she feels that she can hide away when she wants to, thereby participating in some of the PE activities, than her not showing up. The article suggests that this student can be viewed as negotiating her own curriculum through bodily positioning, clearly signaling her desire. Through such bodily positioning, she signals her desire not to be noticed and 'convinces' the teacher not to comment on her behavior. From a Deweyan point of view (1938/1997, p.71-72), it is argued that this situation exemplifies the importance of teachers being intelligently aware of their students' capacities, needs, and past experiences. As the teacher points out, forcing a student into doing something she does not want to do could lead the student to learn that her opinion and choices do not matter within this context. While keeping the negotiation process implicit, not directing more attention to her, and complying with the student's bodily expressed desire, the teacher intends to teach the student that the PE context is safe. If successful, this choice could be crucial for her further development in PE. Therefore, a central argument in the article is that this situation exemplifies a setting where the negotiation seems to benefit from being kept implicit rather than made explicit.

The article summarizes the findings by claiming that students do seem to participate in curriculum negotiations in the observed contexts in several ways. They participate in explicit curriculum negotiation strategies mainly initiated by teachers to engage and motivate students, but also in implicit negotiations. The article proposes that a key insight concerning this is that practitioners should recognize both the explicit and implicit negotiation processes occurring and view these as potential learning opportunities. Opportunities seem to be missed, where it would be possible to utilize the negotiations occurring to teach students ways of thinking critically and reflectively and help students develop plans and methods that guide their learning. In particular, the article contends that many implicit negotiations that occur could benefit from being made explicit. However, not all implicit negotiations can or should be made explicit. The clue is for teachers to be intelligently aware of the negotiations occurring and to choose whether to make or not to make such negotiations explicit depending upon reflections about the potential educational consequences.

Chapter 5: Discussion

Following the primary purpose and the four research questions posed, this chapter presents a discussion structured into three parts. First, I dedicate some space to discuss the Dewey-inspired conceptualizations of decision-making presented in the articles and how these might contribute to theoretical insights relevant to PE. Then, I discuss different methodological insights and principles presented in the articles and how these have influenced methodological decision-making and the methodology applied within the project. Both these points of discussion are, however, provisional. While each corresponds to its research question, the first two research questions posed in the dissertation are, first and foremost, a means of getting empirical access to student decision-making. Therefore, the key discussion concerns the findings produced when investigating how students participate in individual decision-making, decision-making as assessment, and decision-making as curriculum negotiation. The main point of discussion will be how the findings in the articles seem to contribute to the current understanding of how students participate in decision-making in PE.

5.1 Conceptualizing student decision-making

As presented in Chapters 1 and 3, the dissertation was developed following a qualitative and explorative approach to research. This entails that the conceptualizations of decision-making and the methodological approach presented in the dissertation were not chosen but instead developed. Concerning the development of conceptualizations of decision-making, a key observation within PE decision-making literature (e.g. Enright & O'Sullivan, 2010; Fisette, 2013; Guadalupe & Curtner-Smith, 2019a) is that it is often hard to locate the explicit theoretical perspective of learning utilized to claim different learning benefits of student decision-making (e.g. Van den Berghe et al., 2014). Intending the knowledge produced in this dissertation to have clear learning theoretical origins, the first research question posed and explored was: ***(1) How can student decision-making be conceptualized with an explicit learning theoretical connection?***

As described in Chapter 4, the three articles present three slightly different conceptualizations of student decision-making as possible solutions to the first research question. Article 1 (Aarskog et al., 2018) describes how Dewey's ideas can help conceptualize student decision-making as part of individual learning processes. Here the concept of decision-making relates to how individual students 'choose' to respond to indeterminate or problematic situations

when learning (e.g. Dewey, 1916/1980, p.157-163; Dewey, 1929b, p.296; 1938/1997, p.35). Article 2 (Aarskog, 2020) presents a similar conceptualization but also draws inspiration from Dewey's concept of communication (see e.g. Biesta & Burbules, 2003, p.41) to view decision-making as containing individual and social dimensions. This framework is, in turn, used with formative assessment theory (Black & Wiliam, 2009) to suggest that formative assessment can be viewed as individual and social decision-making. Article 3 (Aarskog et al., 2021), inspired by Dewey's insights concerning learning (Dewey, 1910/1997, p.72; 1916/1980, p.164), the principles of interaction and continuity (Dewey, 1938/1997, p.34-44), and purpose formation (Dewey, 1938/1997, p.67), present decision-making as different implicit and explicit curriculum-negotiations that can and will occur as students learn.

While the dissertation addresses the first research question posed by presenting different conceptualizations and connecting them to the Deweyan learning theoretical position, this connection involves several considerations. Dewey's perspective has received critique (Thorburn & MacAllister, 2013), and as Boostrom (2016) shows, citing and using Dewey in a superficial and sometimes false manner is common. There are, however, multiple sources that consider Dewey's thinking valuable for educational and PE scholarship (e.g. Biesta & Burbules, 2003; Bjørke et al., 2020; Boostrom, 2016; Quennerstedt et al., 2011; Thorburn, 2020) Inspired by scholars such as Biesta (1995, p.105), I, therefore, choose to work from the view that while critics may be right in suggesting that Dewey's pragmatism may not be particularly useful in guiding educational practice, it can be a critical and constructive tool when used to think about education. As Biesta and Burbules (2003, p.110) suggest, it can provide a framework that enables inquiry into taken-for-granted ideas and purposes and offers possible action-consequence connections that can inform educational decision-making. With this in mind, Dewey's perspective was not chosen because I believe his theories are more authentic, precise, or relevant than other perspectives. Instead, the perspective was used to provide additional understandings of decision-making than what is common in PE literature (e.g. Hastie et al., 2013; Howley & O'Sullivan, 2021b; Smith, 2016). The conceptualizations of decision-making developed from Dewey's concepts helped me ask different questions and gain other insights. Combining Dewey's work with different theoretical perspectives may have been possible and potentially beneficial. As stated, though, there is literature to suggest that it is easy to utilize Dewey superficially (Boostrom, 2016); his completed works are vast (Fesmire, 2014, p.10), and as Thorburn (2019) suggests, one should use Dewey's theories

with some care. Therefore, a choice was made to engage more deeply with Dewey's ideas rather than combine them with other perspectives and risk the possibility of theoretical inconsistencies.

Through deeply engaging with Dewey's theories, the dissertation makes a theoretical contribution to PE research and practice. The theoretical insights presented in Article 1 (Aarskog et al., 2018) contribute by proposing that decision-making may not simply be viewed as a pedagogical tool that teachers can apply to increase motivation (e.g. Sun et al., 2017) and engagement (e.g. Guadalupe & Curtner-Smith, 2019b) or to direct learning towards specific learning outcomes (e.g. Mosston & Ashworth, 2008, p.18). It can also be conceptualized as integral to every student's learning process. In addition, by suggesting that decision-making involving student reflection is educationally superior to decisions made with little to no thought (e.g. Dewey, 1916/1980, p.157-163), I encourage teachers to provide room for student reflection within their teaching. The theoretical ideas presented in Article 2 (Aarskog, 2020) contribute by connecting formative assessment (Black & Wiliam, 2009) explicitly to a specific learning theoretical perspective. Further, the article suggests that questioning if and how to involve students in assessment (Leirhaug & Annerstedt, 2016; Potdevin et al., 2018) might not be the only central questions to ask. From the conceptual view developed and presented, it is also relevant to question how best to take advantage of and guide students in the assessment decisions they constantly make when learning. The key educational idea proposed in this article is for teachers to figure out how to help students habituate reflective and social decision-making strategies as part of their assessments in future problem-solving and learning. The Dewey-inspired framework in Article 3 (Aarskog et al., 2021) contributes by suggesting that we should question specific normative ideas about "good" and "bad" forms of negotiation (see e.g.Wahl-Alexander et al., 2016) and that we pay attention not only to explicit teacher-facilitated negotiations (Guadalupe & Curtner-Smith, 2019a) but also to the implicit negotiations that constantly occur within teaching-learning contexts. This idea can motivate practitioners to make implicit curriculum negotiations explicit and teach students how to develop and re-develop purposes as they learn. In addition, it also incentivizes teachers to consider students' internal conditions and experiential backgrounds when making such choices.

The three articles link individual decision-making, assessment, and curriculum negotiation to a specific learning-theoretical perspective that provides further ideas potentially beneficial for educational decision-making and research. In addition, the dissertation provides a detailed account of several central concepts and principles within this perspective that can help connect individual decision-making and learning, decision-making as assessment, and decision-making as curriculum negotiation to more general views within Dewey's scholarship. This can, in turn, help readers of the individual articles contextualize the unique conceptualizations of decision-making within the larger learning theoretical, ontological, and epistemological framework of Dewey.

5.2 A Dewey-inspired methodology for investigating student decision-making

In light of the literature presented in Chapter 1, I argue that while methodological approaches to investigate different forms of decision-making (e.g. MacPhail et al., 2008) and learning (e.g. Quennerstedt et al., 2014) in PE exist, it is hard to locate a methodological approach specifically designed to investigate student decision-making as part of student learning. Another observation concerns how research on student actions, reflections, and interactions (e.g. Barker et al., 2015a; Barker et al., 2017; Brock et al., 2009) seems to provide insights that complement and challenge dominating ideas about student decision-making in PE. Against these observations, the second research question is: ***(2) How can student decision-making be investigated by focusing on student actions, reflections, and interactions?***

The conceptual framework in each of the three articles suggested methodological implications. By identifying and addressing these methodological implications, the more extensive methodological approach presented in Chapter 3 was progressively developed. In the first article, Article 1 (Aarskog et al., 2018), I was inspired by Dewey's transactional view of experience and learning (e.g. Dewey, 1916/1980, p.151; 1938/1997, p.35). This view of experience and learning suggested that questioning *if* students make decisions when learning was not educationally relevant since, from this theoretical perspective, students will always make decisions when learning. The relevant questions are, instead, *what* and *how* students make decisions. Further, since what and how of decision-making can be viewed as interconnected within Dewey's perspective (e.g. Dewey, 1938/1997, p.39-40), a methodological implication that followed was that studies aiming at investigating either what

or how students make decisions should be able to consider both. Further, Article 1 (Aarskog et al., 2018) also points out that if decision-making is conceptualized as involving action and a varying degree of thinking, it is vital to generate empirical material informing both aspects. However, information concerning the single individuals' actions and thinking is still insufficient. When considering Dewey's view of learning and decision-making as always being influenced by the specific social, cultural, and material context (e.g. Dewey, 1938/1997, p.39-40), gathering information about the context also seems essential.

To uphold these methodological principles, Article 1 (Aarskog et al., 2018) presents three research methods for investigating student decision-making. It is suggested that participatory observations (e.g. Delamont, 2004) can be used to gain insight into the context and actions within. Concerning participatory observations, a central feature of how all three articles (Aarskog, 2020; Aarskog et al., 2018, 2021) suggest the participation be carried out is again inspired by Dewey's connection between experience and the specific material, social and cultural context experienced (e.g. Dewey, 1938/1997, p. 39-40). From this connection, one would expect to experience PE differently when participating through different roles. A methodological consequence presented is that when conducting participatory observations, it could be beneficial to participate in various roles (e.g., as a teacher, peer student, and a researcher asking questions) to broaden the possible insights one can gain. Further, concerning participatory observations, all three articles suggest that participatory observations can enable the researcher to capture multiple characteristics of student decision-making in PE. Examples of such characteristics are presented in Articles 2 and 3 and Section 3.3.2. Article 1 (Aarskog et al., 2018) moves on from participatory observations to suggest video observation as a suitable method to capture most actions, interactions, and communication occurring in the context. Concerning video observation, it is proposed that the characteristics developed in the participatory observations serve as practical focal points when conducting video observations targeting student decision-making. Not only does this make room for using handheld cameras to focus on specific situations of interest, but it also helps keep video analysis as short as possible. Keeping video analysis short is viewed as beneficial when implementing SRI's, the last method step suggested in Article 1 (Aarskog et al., 2018). SRI's are used to get hold of student thinking related to specific actions and situations. The underlying idea for keeping the time period between video observation and SRI's short is that while SRI's can provide valuable information when conducted after prolonged video

observation periods (e.g. Quennerstedt et al., 2014), this logically results in significant time elapsing between observed actions and the interviews. While this may not be problematic if the aim is to get empirically close to what the actors within specific situations think about what is occurring, it is a concern if the aim is to get close to what they *were* thinking within specific situations (Dempsey, 2010). This is relevant when investigating student decision-making conceptualized as student actions and thinking (Dewey, 1910/1997, p.72; 1922, p.190).

While Articles 2 (Aarskog, 2020) and 3 (Aarskog et al., 2021) suggest the same research methods be used as Article 1 (Aarskog et al., 2018), they contribute their methodological principles and insights. As presented in Section 5.1, these articles introduce Dewey's concept of communication (e.g. Dewey, 1929a, p.177-181) to conceptualize decision-making. This introduction, in turn, implies not only that communication *influences* individual decision-making but that decision-making itself can take the form of explicit and implicit communication occurring within contexts where students learn. Gathering information concerning communication is therefore not just beneficial to understanding individual student decision-making. It is important because communication is, at times, a decision-making process. Article 2 (Aarskog, 2020) further suggests how combining assessment theory (Black & Wiliam, 2009) and the Dewey-inspired framework can contribute methodological guidance and practical concepts for analyses concerning assessment. Article 3 (Aarskog et al., 2021) builds on these ideas but relates them to curriculum negotiation. It is suggested that Dewey's ideas about individual learning and communication (see e.g. Fesmire, 2014, p.87-90), the principles of interaction and continuity (Dewey, 1938/1997, p.34-44), and purpose formation (Dewey, 1938/1997, p.67) can be utilized to develop characteristics of explicit and implicit forms of curriculum negotiation that can be used to recognize, investigate and analyze student decision-making as negotiations in PE.

In addition to holding methodological insights relevant to investigating assessment and curriculum negotiation, Articles 2 (Aarskog, 2020) and 3 (Aarskog et al., 2021) present a central dimension of the research design. Drawing inspiration from Dewey's ontological and epistemological viewpoints (e.g. Biesta & Burbules, 2003; Fesmire, 2014) and scholars such as Morgan (2014) and Seale et al. (2004, p.1-11), the research design applied in all three articles (Aarskog, 2020; Aarskog et al., 2018, 2021) was developed to be versatile. While the

research design presented in the articles can seem relatively fixed, as shown in Chapter 3, each method step suggested is followed by a preliminary analysis period. Within these stages of analysis, a key task is to judge whether each step has been sufficient and plan for the next, considering the specific context and actors investigated. Another, albeit minor, methodological insight held in Articles 2 (Aarskog, 2020) and 3 (Aarskog et al., 2021) is the suggestion of using video editing in preliminary video analysis. While this choice is not explicitly inspired by Deweyan ideas, I suggest that rather than view, re-view, and take notes concerning video and audio material from different sources (e.g. Quennerstedt et al., 2014), making video edits that use the "best" angle and audio source, of each individuals' actions, interactions, and communication, and then view and re-view these can be an effective way of immersing oneself into the material (Braun & Clarke, 2006) and that it makes the following viewing and re-viewing less time-consuming. Keeping this less time-consuming relates to one central methodological limit existing within the proposed methodological approach.

While the methodology applies method triangulation (see e.g. Bryman, 2016, p.386) to secure credible findings, using SRI's will always involve issues such as memory retention, post hoc rationalization, and the possible lack of language to communicate thinking (Dempsey, 2010). Keeping the time between video observation and SRI's as short as possible, while potentially lessening the effects of lack of memory retention and the interviewees resorting to post hoc rationalizations, can never remove this issue. There are, however, further limits worth noting. A second limit is related to the duration of implementation of each research method, the time frame to conduct preliminary stages of analysis, the amount of material gathered, and the number of informants. While the choices that have been made, as explained in Chapter 3, are a result of several stages of analysis, in keeping with central hallmarks of qualitative research (Bryman, 2016, p.375-398), and working from a Dewey-inspired ontological and epistemological standpoint (Biesta & Burbules, 2003, p.109-111), these choices do limit the conclusions that can be drawn from the study. A third limit is that the methodology is ontologically, epistemologically, and conceptually bound. The methodology developed, by building on Dewey's ontology, epistemology, and learning theoretical ideas, can thus be the target of several of the same points of criticism that are directed towards Dewey's philosophy (see e.g. Fesmire, 2014, p.69-73; Thorburn & MacAllister, 2013). All findings and conclusions drawn from applying the suggested methodology should be read with these limits in mind. That the research methods chosen and the analysis strategies used are in themselves

well-established and considered versatile and able to produce both reliable and valid material (Braun & Clarke, 2006; Bryman, 2016; Dempsey, 2010; Fangen, 2004; Quennerstedt et al., 2014; Seale et al., 2004), do not broaden these limits.

5.3 Student participation in decision-making in PE

As presented in Chapter 1, to contribute knowledge and insights into how students participate in decision-making in PE, and in light of Norwegian school policy prescribing student participation in decision-making regarding planning, implementation, and assessment (Kunnskapsdepartementet, 2017; Kunnskapsdepartemetet, 2006, p.33), two empirical research questions were developed:

(3) How do students participate in assessment processes occurring in Norwegian PE?

(4) How do students participate in curriculum negotiation in Norwegian PE?

These research questions are addressed in detail in Articles 2 (Aarskog, 2020) and 3 (Aarskog et al., 2021), respectively. Rather than discussing these specific research questions again, I will in this section discuss the findings presented in all three articles in terms of the larger purpose of the dissertation. The discussion will center on what the insights produced about student individual decision-making, student participation in assessment, and student participation in curriculum negotiation can tell us about how students participate in decision-making in PE.

A central idea presented in the literature review in Chapter 1 is that PE literature tends to present the subject of PE as a teacher-centered subject where students typically have few opportunities to make decisions (Howley & O'Sullivan, 2021b; Mitchell et al., 2015; Moen et al., 2018). While there are opposing voices (e.g. Amade-Escot, 2006; Barker et al., 2017; Brock et al., 2009), this narrative seems built mainly on almost hegemonic ideas concerning teacher practices and student opportunities to make decisions in PE. In terms of teacher practices, large parts of PE literature related to student decision-making identified in the review present PE as a subject dominated by teachers using teacher-centered teaching styles (e.g. Kirk, 2010, p.3-4; Larsson & Karlefors, 2015; Smith et al., 2009). Similar claims can be found in PE assessment literature (Leirhaug & Annerstedt, 2016) and curriculum negotiation literature (Howley & O'Sullivan, 2021a). Regarding these ideas concerning teacher practices in PE, the three articles presented in this dissertation (Aarskog, 2020; Aarskog et al., 2018,

2021) contain some findings that align with previous literature. As in previous assessment literature (e.g. Leirhaug & Annerstedt, 2016), the teachers seldom seem to initiate systematic self- or peer-assessment strategies. Another similarity presented in Articles 2 (Aarskog, 2020) and 3 (Aarskog et al., 2021) is that when teachers provide feedback and try to help students progress, this feedback often takes the form of teachers demonstrating and telling students what to do (e.g. Kirk, 2010, p.49-50). Further, in Articles 2 (Aarskog, 2020) and 3 (Aarskog et al., 2021), additional similarities are presented. These two articles describe how the teachers observed and interviewed claim that they do not let students participate much in assessment (see e.g.Moura et al., 2021), that they do most of the planning for PE (see e.g. Guadalupe & Curtner-Smith, 2019a), and that they mostly overlook student suggestions for example about how to divide into teams (see e.g. Howley & O'Sullivan, 2021a). Despite these similarities, when taking a closer look at the actions, interactions, and thinking of both students and teachers within two PE contexts in Norway, it seems the teachers provide quite a lot of room for students to make decisions. In Article 1 (Aarskog et al., 2018), while providing feedback, the teacher involved in the empirical example lets a student decide how to proceed with a given task. In Article 2 (Aarskog, 2020), several examples are presented of how the teachers provide room for students to practice and reflect on their own, adapt tasks to themselves, and discuss and reflect on how to solve tasks within groups. In Article 3 (Aarskog et al., 2021), the teachers describe how they involve students in democratic choice processes concerning the activities to be used in PE and provide space for student-driven projects and lessons. This article also presents, among other things, how one teacher utilizes an implicit negotiation to keep off-task-behaviors at an acceptable level, and it shows how the other teacher provides room for one student's agency by not addressing and accepting her stopping to participate when clearly showing through her bodily expressions that she does not want to be noticed.

In terms of literature presenting PE as a subject with few decision-making opportunities for students (see e.g. Beni et al., 2017; Brooker & Macdonald, 1999; Enright & O'Sullivan, 2010; How et al., 2013; Howley & O'Sullivan, 2021a; Kirk, 2010), the similarities with previous literature become less visible. While teacher practices often look like practices deemed to be teacher-centered, the students still seem to make many decisions. In Article 1 (Aarskog et al., 2018), an example of one empirical situation within PE shows how a student makes several decisions when participating in a practice drill in floorball. Article 2 (Aarskog, 2020) provides

several examples of how students participate in decision-making as assessment. Examples range from students developing their own ideas and goals within PE and how they make decisions about where they are in their learning through analyzing teacher comments, comparing themselves with peers and through their feelings and impressions, to how they make decisions concerning how to solve tasks by applying decision-making strategies involving varying degrees of reflection. In article 3 (Aarskog et al., 2021), several examples of how students participate in decision-making through explicit and implicit negotiations, are presented. Students participate in decision-making when they discuss tasks in group work, when they discuss with the teacher, and when they express and act out impulses and desires.

Importantly, the seeming inconsistency between previous literature and the findings in the articles of this dissertation does not seem to have its primary source in the specific context of Norwegian PE. While one should keep in mind that all the examples provided do have their origin in Norwegian PE, a context where, as shown in Chapter 1, one would expect teachers to involve students in decision-making (e.g. Kunnskapsdepartemetet, 2006, p.33), student and teacher behaviors in the empirical examples provided above align well with descriptions from other PE contexts (e.g. Barker et al., 2017; Brock et al., 2009; Howley & O'Sullivan, 2021a; Kirk, 2010; Redelius et al., 2015). Further, previous PE literature related to student decision-making from the Norwegian context also aligns well with international PE literature (Bjørke et al., 2020; Leirhaug & Annerstedt, 2016; Moen et al., 2018; Moen et al., 2015). One way to understand this inconsistency hinted at in both Chapter 1 and Article 2 (Aarskog, 2020), is that PE literature might be dominated by methodological approaches that themselves are teacher-centered. While students are often, for example, interviewed or observed, still it is often the teachers' practices that are in focus and not the practices of students (e.g. Guadalupe & Curtner-Smith, 2019b; Howley & O'Sullivan, 2021b; Leirhaug & Annerstedt, 2016). When findings from such methodological points of view are viewed up against findings produced from a conceptual and methodological approach that focuses more on the actions, interactions, and thinking of students within teacher-led PE, inconsistencies are perhaps bound to be found. This does, however, not mean that the inconsistencies presented should be ignored.

The findings in the three articles concerning how students participate in decision-making in PE could be an additional source of information that can make us question the link, seemingly

created, between teacher-centered approaches to teaching and students having few opportunities to make decisions in PE (e.g. Fisette, 2013; Guadalupe & Curtner-Smith, 2019b; Wahl-Alexander et al., 2016). Notably, questioning this link does not take away the potential value or contribution offered by the suggested solutions to the perceived problem of too little student decision-making in PE (see e.g. Harvey & Jarrett, 2014; MacPhail & Halbert, 2010; MacPhail et al., 2008; O'Connor et al., 2017). However, the conceptual framework presented, combined with the findings in the three articles, suggests that instead of being educational productive because they provide more decision-making opportunities for students, they might contribute by containing strategies and ways of guiding student decision-making that are educational productive. This point aligns well with some central conceptual ideas already presented in Section 5.1, which seem further substantiated by the findings. For one, teachers seem to have the potential not only to provide room for student reflection but also to guide students in their decision-making processes. Such guidance can, in turn, help students to habituate reflective and social decision-making strategies as part of their future problem-solving and learning. Secondly, teachers also seem to have the potential to use negotiations as learning opportunities and, with the insights they possess about student internal conditions, make reflective judgments about when it can be educationally beneficial to make implicit negotiations explicit and when it is beneficial to leave them implicit. To summarize, the key idea is thus that it is not *if* but *how* students make decisions that hold the educational potential, and further that teachers, with this in mind, should provide room and guidance for student decision-making to make students habituate reflective, intelligent, and social decision-making as part of their future learning in PE.

6. Concluding thoughts

To conclude this dissertation, the main arguments are summarized, followed by descriptions and thoughts about how these might contribute knowledge to researchers and practitioners working within PE. In this presentation, some suggestions for further research are proposed.

As stated in Chapter 1, the dissertation aims to contribute knowledge relevant to understanding how students participate in decision-making in PE. The literature review presents four general arguments related to this aim in Section 1.3. For one, the review suggests that it is often hard to locate the specific learning theoretical position used to make claims about learning benefits in PE decision-making literature (e.g. Enright & O'Sullivan, 2010; Guadalupe & Curtner-Smith, 2019a). Secondly, PE literature seems to present PE as dominated by teacher-centered teaching practices and that students have few opportunities for decision-making in standard PE (e.g. Guadalupe & Curtner-Smith, 2019a; Howley & O'Sullivan, 2021a), and this idea is often used to claim a lack of student decision-making opportunities a central challenge in need of solving in PE (e.g. Howley & Tannehill, 2014; Tangen & Nordahl Husebye, 2019). Thirdly, and related, the literature suggests that the lack of opportunities to make decisions, also presented in Norwegian PE literature (e.g. Leirhaug & Annerstedt, 2016; Moen et al., 2018), can indicate a mismatch between Norwegian policy and practice. Fourth, the review identified that while a range of methodological approaches holding theoretical frameworks, research designs, and methods that *can* be used to investigate student decision-making exist (e.g. Amade-Escot, 2005; Quennerstedt et al., 2014), it could be beneficial to develop methodologies designed explicitly to studying student decision-making in relation to student learning.

Against these four identified arguments, the dissertation presents a conceptual framework inspired by Dewey's theoretical perspective, a methodological approach designed to investigate student decision-making, and empirical findings exemplifying how students make individual decisions, participate in assessment, and participate in curriculum negotiation in Norwegian PE. A point worthy of some reflection, however, is how these developments and findings can contribute to researchers and practitioners working within the field of PE. Considering the Dewey-inspired science theoretical position taken in this dissertation (Biesta & Burbules, 2003, p.110; Morgan, 2014), I suggest that they can contribute by providing

ideas that enable questioning taken-for-granted ideas, purposes, and practices and offer possible action-consequence connections that can inform educational decision-making. In the following, I suggest how this can benefit researchers and practitioners alike.

From a researcher's perspective, the conceptual, methodological, and empirical insights presented in the dissertation can be valuable for researchers interested in decision-making on their own. However, when the insights produced about all three areas are considered together, I suggest this adds value. When considered together, the dissertation represents an example of what insights and knowledge can be produced if the primary focus is shifted from PE teachers' practices to how students act and interact within teacher-led practices. Within such a methodological shift, the teachers are not the primary sources of information; they are considered actors that frame student actions, interactions, and thinking and are valuable sources for gathering information about students. The discussion presented in Chapter 5, Section 5.3 suggests that when research is conducted framed by such a methodological focus, the findings that can be produced hold a potential to complement, and sometimes challenge, common and taken-for-granted ideas within the field of PE. While the dissertation contains several insights considered relevant for researchers interested in student decision-making, I consider such specific insights subsidiary to this larger contribution. Furthermore, this contribution contains a recommendation for future research by suggesting that there is a potential to contribute new knowledge by utilizing student-centered approaches to research in PE.

Concerning the conceptual, methodological, and empirical insights related to student decision-making, the dissertation presents several considered relevant for researchers. For example, the conceptualization of decision-making as primarily behavioral and inherent in every learning process, how the participatory observations are conducted through shifting roles, and that teachers commonly seem to stop student reflection when they try to help students learn are all considered of potential value for researchers working within the field. These insights, in turn, recommend conducting more investigations into student decision-making, learning, and their interconnectedness from different conceptual and methodological points of view because such investigations can broaden the knowledge about this phenomenon in PE. Articles 2 and 3 further propose this to be beneficial within the two subfields studied: Assessment in PE and curriculum negotiation in PE. Here, the findings in

this dissertation suggest that additional ways of conducting and understanding assessment and curriculum negotiation can still be developed. Considering this, I conclude this paragraph by suggesting that the larger contribution of this dissertation for researchers working within the field of PE is that it shows the potential inherent in changing the perspective and methodological access used when investigating PE. There is a potential for grasping new and exciting dimensions of something we perhaps thought we knew, whether this is decision-making or something else, if we do so.

For practitioners, the conceptual and empirical findings indicate that while the teachers do conduct their profession intelligently and reflectively, and while students do participate in decision-making processes in multiple ways, there is a potential to recognize both student self- and peer-assessment processes, and many of the implicit negotiations that occur in PE, as potential teaching-learning opportunities. From the conceptual framework developed, practitioners can be motivated to reflect on whether they guide student reflections and help students develop purposes or whether they mainly teach as “show and tell”. Further, the dissertation can help teachers question the idea that simply providing room for voice and choice will be beneficial for student learning. While I do not contest that choice provided in a particular manner can promote motivation, engagement, and enjoyment of PE (e.g. Enright & O'Sullivan, 2010; Mitchell et al., 2015), what this dissertation suggests is that it is not adding choice that is beneficial, but rather the guidance and help to navigate choice that can positively impact student engagement and learning. In the three articles, teachers can get access to examples of how teachers can do this and how teachers could have done this.

Further, in relation to the specific context of Norway, the dissertation presents ideas that teachers can use to understand that they do not necessarily need to provide students with choices, such as choosing activities, teams, or end-of-lesson content, to uphold the policy concerning students right to participate (e.g. Kunnskapsdepartemetet, 2006, p.33). While teacher actions directed to include students in decision-making certainly can include such forms of choice, the policy can also be upheld by utilizing reflective feedback and guiding student decision-making concerning specific learning situations. A related point worth noting is that just as Dewey rejected the dualism of body-mind and individual-society (Fesmire, 2014, p.73-74; Shusterman, 2008, p.181-183), Dewey’s understanding of purpose formation as a continuously developing plan and goal for our learning (Dewey, 1938/1997, p.69), in a

sense abolish the separation between planning, implementing, and assessing. When we develop purposes as we learn, we constantly plan, implement, and assess to figure out where we are, where we are going, and how best to get there. From this perspective, teachers will uphold the regulations concerning including students in decisions concerning the planning, implementation, and assessment of PE if they include and guide students in the formation of mutual purposes that guide student learning in PE. When Norwegian PE teachers know this, they might refrain from letting students make educational decisions the teachers view as inappropriate just to uphold student rights. They can rather concern themselves with guiding student learning in educationally worthwhile directions.

There are, however, limitations to the research that should be addressed as a final food for thought. The findings presented in the articles are based on a Dewey-inspired qualitative research approach and should be read as such. One should, therefore, be cautious of drawing conclusions about how students participate in decision-making in PE from this dissertation's findings alone. What is presented here is how students and teachers within two specific PE classes in Norway seemed to make decisions within two specific contexts when investigated and analysed from a specific perspective. The arguments and conclusions drawn are, therefore, not an attempt to present empirically generalizable insights into how students participate in decision-making in PE. What is presented is rather how we can use the insights of specific student and teacher actions and thinking in two specific Norwegian PE classes during a specific period of time as thinking tools for educational decision-making and as inspiration for further research. All findings in the papers, the ideas presented in the discussions, and the arguments made in the concluding thoughts should be read with this in mind.

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Dissertation articles

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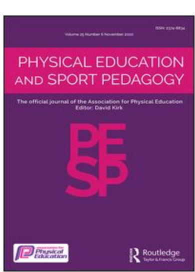

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‘When it’s something that you want to do.’ Exploring curriculum negotiation in Norwegian PE

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ABSTRACT

Background: Student participation in curriculum negotiation has been widely regarded as beneficial for student engagement, motivation, and learning. Within the physical education (PE) context however, several scholars claim that these benefits are seldom realized. Interestingly, most investigations into curriculum negotiation in PE focus on teacher actions and behavior. Investigations of students’ actions in curriculum negotiation are rare. Further, while much of the literature claims curriculum negotiation is potentially beneficial for student learning, few of the conceptual and analytical frameworks utilized within previous PE literature are based on explicit learning theories.

Purpose: The purpose of this paper is to explore student participation in curriculum negotiation in Norwegian PE through the lens of an explicit learning theoretical perspective.

Method: A 10th grade class with 23 students (age 15–16) and an 8th grade class with 30 students (age 13–14) from 2 different schools, and their respective teachers were recruited for the project. Within these classes, participatory observation, video observations, and stimulated recall interviews were conducted to produce empirical material related to curriculum negotiation. The material then underwent qualitative thematic analysis where select parts of John Dewey’s educational philosophy were used as the analytical framework.

Results and discussion: With a basis in the analytical framework developed from Deweyan educational philosophy, the results show that students within the two contexts participate in both explicit and implicit forms of curriculum negotiation. Explicit curriculum negotiations to a large degree appear to be governed by the teachers and are deemed by teachers to be part of strategies for upholding Norwegian legislations and recommendations for including students in curricular decision-making. While not as easily noticeable, implicit forms of negotiations were more prominent within the explored contexts. The analysis also suggests that from a Deweyan perspective, possibilities to increase learning through curriculum negotiations occur when teachers notice, help, and guide students in their own reflective processes surrounding how to act in PE. Such pedagogical action makes implicit negotiations occurring more explicit, and explicit negotiations more intelligent.

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Introduction

Educational research suggests that participation in curricular negotiation can significantly increase student motivation and improve learning outcomes (e.g. Boekaerts, Pintrich, and Zeidner 2000; Black and Wiliam 2009). Within physical education (PE), scholars have suggested that curriculum negotiation is important for student engagement (e.g. Mitchell, Gray, and Inchley 2015), motivation (e.g. Hastie, Rudisill, and Wadsworth 2013; How et al. 2013), that it is a key aspect of effective teaching (e.g. Goodyear and Dudley 2015; Mosston and Ashworth 2008), and that it is essential for effective formative assessment (e.g. López-Pastor et al. 2013). Despite its importance, researchers suggest that students still have limited opportunities to make curricular decisions within PE programs (e.g. Kirk 2010; Mordal-Moen et al. 2015). Enright and O'Sullivan (2010) for instance propose that; '

> students' voices have been largely absent from decision-making processes regarding conceptualizations, implementations and evaluations of their PE curricular experiences' (204).

Given the potential benefits of student participation in curriculum negotiation and concurrent claims that these benefits are seldom realized, the purpose of this paper is to explore student participation in curriculum negotiation in Norwegian PE through the lens of an explicit learning theoretical perspective. To address this purpose, we first present a summary of previous literature regarding curriculum negotiation in PE. Then a section dedicated to our Deweyan framework (Dewey [1910] 1997, [1916] 1980, [1938] 1997) is presented. Here, we describe how curriculum negotiation looks in practice and connect curriculum negotiation to learning. This is followed by a presentation of the methodological steps used to generate and analyze empirical material gathered within Norwegian PE. Following this methodology section, we present examples of practices identified as different forms of curriculum negotiation within two Norwegian PE classes. The paper concludes with a general discussion of the examples presented in relation to existing literature and the Deweyan framework. Here, we provide new insights and recommendations for both practitioners and researchers interested in curriculum negotiation in PE.

PE literature on curriculum negotiation

Curriculum negotiation has been understood in different ways in PE scholarship. In some literature (e.g. Enright and O'Sullivan 2010; Guadalupe and Curtner-Smith 2019a, 2019b), curriculum negotiation has been equated with teachers taking deliberate actions to involve students in planning and implementing content. From this perspective, curriculum negotiation is a pedagogical alternative to traditional teacher-centered practices, is primarily the responsibility of teachers, and is relatively focused on content. Others have suggested that curriculum negotiations are present in all teaching and learning situations (Barker, Quennerstedt, and Annerstedt 2015; Amade-Escot 2006). In this work, curriculum negotiation is not viewed as an alternative approach to teaching, but rather a part of learning itself (see e.g. Barker et al. 2017; Mosston and Ashworth 2008).

Notwithstanding differences in conceptualizations, PE scholars have claimed that student participation in curriculum negotiation holds a range of educational benefits (e.g. López-Pastor et al. 2013; Guadalupe and Curtner-Smith 2019a; Shen et al. 2009). A number of researchers have suggested that helping students make curricula decisions can increase student interest, motivation and engagement (Howley and Tannehill 2014; Mitchell, Gray, and Inchley 2015; Shen et al. 2009; Smith, Green, and Thurston 2009). Enright and O'Sullivan (2010) for example, maintain that helping students to take ownership of their own learning through curriculum negotiations can be exciting and energizing for students, and that it contributes to the production of deep learning and insights.

Despite general acceptance of the value of student involvement in curriculum negotiation, there are factors that prevent it from happening. Some scholars point out that power dynamics resulting from differences in ability and status mean that certain students are excluded from negotiation processes.

Brock, Rovegno, and Oliver (2009) claim more specifically that student status understood as perceived popularity affects students' willingness to contribute to group discussions, along with the weight different voices are given in group situations. Other scholars have pointed to the complexity of curriculum negotiation processes, suggesting that they can be difficult for teachers to manage (e.g. Howley and Tannehill 2014; Wahl-Alexander, Curtner-Smith, and Sinelnikov 2016). In this work, issues such as core curriculum restrictions, support from school leaders, student willingness to engage in novel practices, and teacher knowledge and motivation, can all affect if and how curriculum negotiation takes place.

Finally, a small number of researchers suggest that curriculum negotiation does not necessarily impact learning positively. Wahl-Alexander, Curtner-Smith, and Sinelnikov (2016) claim that while involving students in decisions concerning aspects such as task difficulty and complexity can enhance learning, the opposite is also possible. Wahl-Alexander, Curtner-Smith, and Sinelnikov (2016) point out that students sometimes negotiate by giving less effort, refusing to participate, fooling around, or arguing with the teacher (see Cothran and Kulinna 2007; Barker and Annerstedt 2016). As such, Wahl-Alexander, Curtner-Smith, and Sinelnikov (2016) claim that curriculum negotiation can be categorized as positive or negative, where evaluations are normative in that they privilege certain views of actions over others.

Theoretical analytical framework: Dewey and curriculum negotiations

While curriculum negotiation is conceptualized differently within existing PE literature, few conceptualizations are explicitly rooted in learning theories. In this paper, a learning theoretical perspective previously used in PE literature to conceptualize both learning (e.g. Quennerstedt, Öhman, and Öhman 2011; Quennerstedt et al. 2014) and student decision making (e.g. Aarskog, Barker, and Borgen 2018; Aarskog 2020) has been chosen, namely the educational perspective of John Dewey. More specifically we draw upon selected parts of Dewey's works connected to learning and conceptualize these ideas in relation to student decision making. By doing this we present a framework we suggest can be used to understand curriculum negotiation as an integral part of learning experience. In order to present this framework, we will start with some general descriptions of Deweyan ideas related to learning, and then move to more specific concepts related to decision making and curriculum negotiation.

When presenting Deweyan ideas related to learning, a general point for Dewey is that he saw learning as fundamentally connected to the idea that humans act upon their environment and simultaneously undergo the consequences of their actions. For Dewey, learning resides in making connections between these actions and consequences (Dewey [1938] 1997, [1916] 1980). Furthermore, new learning arises in what Dewey termed indeterminate or problematic situations, essentially situations where we do not know what to do. Through resolving such situations through actions and reflection, new knowledge and habits are formed (Dewey [1916] 1980, [1938] 1997). Dewey suggested that in educational contexts however, teachers do not have to wait for problematic situations to arise. Teachers can and indeed should, facilitate or create such situations for students (Biesta and Burbules 2003).

The creation of learning situations is however not something the teacher should do on their own. Dewey asserted that students themselves should in fact be involved in this process (Dewey [1910] 1997, [1938] 1997). This idea can be traced to the notion that for experiences to be truly educative, there needs to be a correspondence between what Dewey termed *internal* and *external* conditions of a situation (Dewey [1938] 1997). That is, there needs to be a match between an individual's internal conditions such as interests, desires, skills and knowledge, and the external demands of a given 'task' or problem. An example could be a teacher assign students the external task of dunking a basketball. If the students can 'match' the task through internal conditions such as being able to jump high enough, the task can be educative. If they cannot, the situation will not lead to growth and will close rather than open avenues of wider and richer experience (Dewey [1938] 1997, [1916] 1980). A

central point within Dewey's educational philosophy that follows such an understanding is that students should be involved in framing the situations, problems and/or tasks they face in education. This because, as Dewey puts it, no one knows students' internal conditions better than the students themselves (Dewey [1938] 1997, [1916] 1980). Dewey therefore suggested that teachers should include students in forming the *purposes* that guide their learning (Dewey [1916] 1980, [1910] 1997, [1938] 1997).

For Dewey ([1938] 1997), purposes are not simply impulses or desires, but plans and methods for achieving the desires. Dewey's point was that acting on mere impulse or desires means acting without knowledge of consequences and therefore without any form of control (Dewey [1938] 1997). Teaching therefore involves helping learners to form purposes that go beyond impulse and desire. Students should be included in developing plans and methods to achieve the goals they want to achieve (Dewey [1938] 1997, 70). Dewey furthermore stressed that in education, it is valuable for students to learn to develop and re-develop purposes throughout their learning (Dewey [1938] 1997, [1910] 1997, [1916] 1980). Dewey's point was that to help students learn to learn, teachers need to be intelligently aware of the capacities, needs, and past experiences of students and to help students develop plans for learning (Dewey [1938] 1997). According to Dewey, if teachers do this they can help students reach educational goals, while at the same time helping them to acquire the habit of forming purposes when learning (Dewey [1938] 1997, [1916] 1980, 1902).

Dewey's assertions relate to curriculum negotiation in four ways. First, teachers can work from the premises that: (1) different learners have different impulses and desires, and (2) one individual can have several impulses and desires at the same time. These possibilities suggest that almost any educational context contains potential for multiple and conflicting impulses, desires and purposes and therefore multiple and conflicting actions. From this perspective, curriculum negotiation can be understood as a process arising when students and teachers act upon differing impulses, desires or purposes.

Second, Dewey suggested that actions involve undergoing consequences which results in some form of learning. In schools, consequences include reactions from fellow students and teachers. Regardless of consequences, actions and reactions with a basis in differing desires or purposes can be viewed as a process of negotiating the lines of acceptable action. Curriculum negotiation is thus a potential learning process.

Third, from a Deweyan point of view, curriculum negotiation can positively impact learning in two ways: (1) It can help facilitate a match between internal and external conditions of learning situations (Dewey [1938] 1997)). (2) It can help students to acquire habits of utilizing purpose formation as part of their learning processes.

Fourth, although many of the actions taking place during lessons are explicit (e.g. verbal suggestions, explanations or appeals), curriculum negotiation does not necessarily need to be verbal or explicit. Even implicit actions taken by students and teachers can be understood as forms of negotiation *if* there exist differing desires and purposes within the context.

In relation to this paper's purpose, the Deweyan framework enables us to understand how students can participate in curriculum negotiation and to discuss these findings in relation to learning. To explore participation however, a methodology enabling such exploration is needed.

Methodology

To explore curriculum negotiation in accordance with a Deweyan framework, a methodology was developed within a research project exploring different aspects of students' decision-making (see Aarskog 2020; Aarskog, Barker, and Borgen 2018). The current paper draws on material obtained within this project. In the following, we first present the steps and preliminary analyses carried out within this project. We then turn to the analysis process specific for this paper. First though, we introduce the research context and participants.

Research context

In accordance with the United Nations Convention on the Rights of the Child (UNCRC), Norwegian students have the right to participate in decision-making within their own education, in accordance with their age and maturity (United Nations 1989). Since ratifying the UNCRC in 1989, this right has been integral to Norwegian education, and was further strengthened with educational reform in 2006. Norwegian educational policy states that students should be involved in different forms of curriculum negotiation and their own assessment within all school subjects (The Norwegian Directorate for Education and Training 2020; Forskrift til opplæringslova 2009). Despite policy however, existing research indicates that while student participation is expected, teachers make most of the curricular and assessment decisions in Norwegian PE (e.g. Mordal-Moen et al. 2015; Leirhaug and Annerstedt 2016). Somewhat paradoxically, research also suggests that student decision-making in PE decreases as students get older (Mordal-Moen et al. 2015).

Participants

As research suggests that student involvement in decision making decreases with age in Norway, students and their teachers from junior rather than senior high schools were recruited. Elementary schools were also ruled out as we wanted to be able to explore decision-making related to assessment and grading practices, which start in junior high in Norway. In addition, we wanted to recruit both a rural and an urban school, and include classes from different age groups. A 10th grade class (age 15–16) with 23 students (9 male and 14 female) from a rural area, and an 8th grade class (age 13–14) with 30 students (13 male and 17 female) from an urban area and their respective teachers, were recruited. Both teachers were male, formally qualified, and relatively experienced. In accordance with ethical guidelines, the project was reported to the Norwegian Centre for Research Data (NSD), and prior to the study the participant teachers, participant students and their legal guardians gave their assent to participate.

Data collection and analysis

The data collection and analysis processes within the larger project contained six different stages, ending with a seventh stage of analysis directed towards different themes and papers. The different stages are briefly presented in Figure 1.

Participatory observations

Data collection started with a four week participatory observation period (Delamont 2004; DeWalt and DeWalt 2011), with one 90-minute lesson observed each week in each class. The first author observed the lessons, alternating between the roles of participant assistant teacher, participant student, and observer researcher. Observation was done in accordance with agreements made with

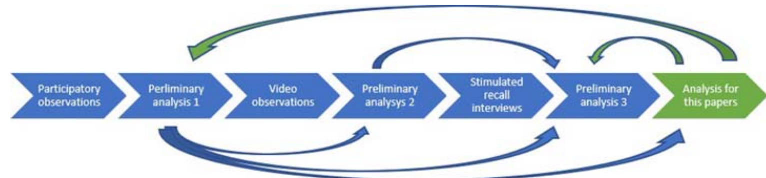

Figure 1. Method steps and analysis process.

both teachers prior to the observed lessons. In addition, the third author observed one of the lessons in each class from the sidelines, as second researcher. The observations were carried out in order to gain insights into student and teacher experiences and context (DeWalt and DeWalt 2011). Within the observation period, field notes were taken during and immediately after each observed lesson.

Preliminary analysis 1

Both during and in the week following the participatory observations period, preliminary analyses were conducted. The analyses consisted of hermeneutic reading of field notes by the first author (Fauskanger and Mosvold 2014) and reflexive dialogue between the first and third author (Braun and Clarke 2006). The purposes of the observation period and the preliminary analyses was to develop ideas and criteria for what student decision-making in relation to their own learning looked like. In addition, the analysis helped us to better understand how to conduct video observations of student decision-making.

Video observations

One week after the participatory observation period ended, video observation (Derry et al. 2010) was used to capture one 90 minute lesson with each class. Two cameras on tripods with sensitive microphones were placed in diagonally opposite corners of the gym to capture all the actions occurring. In addition, a third portable camera with a directional microphone was used to zoom in on selected situations. A fourth microphone was placed on the teacher, in order to capture the oral interactions between students and the teacher.

Preliminary analysis 2

Immediately following the video observations, preliminary video analysis was conducted to identify situations of interest and subsequently which students to interview. This analysis process started with the first author editing film from different camera angles into one coherent lesson following the teacher of each class. These video edits were viewed and re-viewed by the first and third author who took notes of situations and students of interest. Video edits for students who were involved in situations of theoretical interest were created from the video that 'best captured' the students' interactions. These students were involved in (a) indeterminate situations on their own, (b) situations where they experienced indeterminateness within group work, (c) situations where the teacher provided feedback one to one, and (d) situations where the teacher provided feedback to a group. The preliminary video analysis thereby closely resembled a part-to-whole deductive approach (Derry et al. 2010). Based on selected clips, selected students, preliminary analysis of the field notes in addition to the larger projects' theoretical framework and purpose, interview guides were (re)developed, and stimulated recall interviews planned.

Stimulated recall interviews

The next step involved stimulated recall interviews (SRI's) (Dempsey 2010). Two male and four female students from the 10th grade, and three male and four female students from the 8th grade, along with both teachers, were interviewed. The interviews were conducted no more than two weeks after the video observations were conducted, and consisted of the first author playing the participants audiovisual recordings of their own behavior, followed by discussing aspects of those recorded situations (Dempsey 2010). In addition, general questions about the planning, implementation and assessment of the lessons and PE were discussed. All interviews were audio recorded.

Preliminary analysis 3

Following the SRI's, the video segments shown during the interviews, and the audio data collected were transcribed and thematically coded by the first author using MaxQDA, a software program for working with extensive qualitative texts. First an *inductive* approach was utilized to code and thematically organize the material using terms and phrases directly from the gathered material. After this a period of *deductive* coding was undertaken where codes and themes used were based upon the theoretical framework (Braun, Clarke, and Weate 2016).

Analysis for this paper

Following the preliminary analysis of the SRI material, we conducted a qualitative thematic analysis (Braun and Clarke 2006). Analysis started with the authors meeting to discuss the gathered video material on several occasions. Working from these discussions, the first author selected transcriptions of the SRI's related to student and teacher actions and thinking within specific situations based upon the coding in Preliminary Analysis 3. A hermeneutic reading (Fauskanger and Mosvold 2014) was then carried out for each of the selected transcriptions. Through this close reading, examples of curriculum negotiation were identified in accordance with Deweyan ideas. Hermeneutic readings of the field notes were then conducted to identify similar situations to those identified in the SRI transcripts. Our intention here was to identify both explicit and implicit forms of curriculum negotiation, and to uncover how examples of such negotiation were experienced by teachers and students. Identification was followed by a theoretical thematic analysis (Braun and Clarke 2006, 11) carried out by the authors through a reflexive dialogue (Braun and Clarke 2006, 9). This enabled us to consider not only how curriculum negotiation was practiced within the explored contexts, but also how these examples could be understood through a Deweyan perspective. This form of analysis and dialogue allowed us to make connections between the observed forms of curriculum negotiation and Deweyan understandings of learning and growth.

Results

In this section, examples of explicit and implicit ways in which students participated in curriculum negotiation in two PE classes in Norway are presented.

Explicit curriculum negotiations

In line with Norwegian regulations, both teachers described explicit curriculum negotiation as an important dimension of pedagogy. At the same time, the interviews revealed that they do most of the planning and purpose formation. For their parts, the students perceived this as 'normal' in PE. Despite this tendency, examples of explicit curriculum negotiation in the form of *verbal student-teacher interactions* are easily recognizable in the gathered material. The interviews conducted with the teachers and students also reveal other strategies of explicit curriculum negotiation utilized by the teachers. While not directly observed, these forms of explicit negotiation are *teacher facilitated democratic choices of activities*, and *student driven projects and lessons*.

Curriculum negotiation as verbal student-teacher interactions

The explicit curriculum negotiations most prominent in the material were negotiations through verbal student-teacher interactions. These mainly occurred as student and teacher questions or suggestions, or as teachers providing students with alternatives. In line with a Deweyan perspective, we do not interpret questions of clarification as acts of negotiation, but instead focus on questions and suggestions directed towards alternative ways of acting or interacting. Examples included suggesting alternative activities, questioning alternative ways of solving tasks, or suggesting how

to divide the class into teams and groups. Both the teachers and students saw this form of curriculum negotiation as common within PE. However, while the two teachers encouraged student questions and input, they seldom seemed to follow student suggestions. As the 8th grade teacher said in his interview:

> We have many students that kind of try to be part of controlling the lesson, to control the division of teams and such. Such suggestions are overlooked, by me at least. It's not the ones that are most eager or good in an activity that should be allowed to control the PE lessons, I think. I tend to focus more on the ones that are insecure.

Both teachers shared the view that every PE class contains students who feel more comfortable making suggestions than others. Both teachers therefore saw their role as ensuring that lessons were adapted to all students and this meant that they made most of the final decisions. Still, the students reported that some suggestions were followed. Suggesting a warmup exercise or proposing that time should be allocated to special interests were both examples mentioned by the students. The 10th grade teacher illustrated this point: 'For example, if somebody is very into skateboarding, and are good at that, they can do that one lesson while the others play handball.' As such, verbal teacher-student interactions not only constituted curriculum negotiation, but occasionally resulted in students getting to decide what occurs within the context.

From a Deweyan perspective, it is worth noting that while the teachers had rationales for either rejecting or following suggestions, these rationales were seldom shared with students. These occasions were missed opportunities to include students in forming reflective purposes. If teachers had shared their reflective decision-making process, the students might have gotten insights into different aspects of different situations and improved their ability to make decisions on their own.

Curriculum negotiation as teacher facilitated democratic choices of activities

While verbal teacher-student interactions were prominent in the observed lessons, the interview material revealed other explicit strategies that the teachers utilized to facilitate curriculum negotiation. One such strategy utilized by the 10th grade teacher was to involve students in activity choice through democratic 'voting' processes each semester. The 10th grade student Ava, explained this strategy by saying:

> We are divided into groups and we get a sheet of paper where we write down the things we want to do in PE in the different seasons. When the teacher makes his plans we see, or its almost only the things we have written down that are included in the plan.

At the same time, the 10th grade teacher admitted that: 'I would probably have much of the same activities anyway, but it is important that they feel that they are taking part in deciding what we do.' While the changes resulting from this process might seem arbitrary, the process is an example of explicit curriculum negotiation. It is also a process that according to students, results in increased motivation and interest. As Rachel said: 'I think it is good because then you give more of an effort when it's something that you want to do, and something you think is fun.'

> While this strategy seemed to have a positive impact on student engagement, motivation and interest, from a Deweyan perspective, it falls short of involving and guiding students in purpose formation. For one, a voting process does not enable each individual student to adapt activities or tasks to their own needs and desires. Secondly, for a voting process to function as purpose formation in PE, the process would need to include discussions of different learning goals and include students discussing which activities they saw as suited to reach these goals.

Curriculum negotiation as student driven projects and lessons

Where the 10th grade teacher referred to the voting process as his main strategy to involve students in curricular decision-making, the 8th grade teacher explained that he has different strategies in

place to facilitate curriculum negotiation throughout the 3 year cycle of junior high school. His teaching is based on a 3-year plan developed within his teacher collegium where the learning activities are set. Still, his plan does include strategies to facilitate student participation in explicit curriculum negotiations. As the teacher pointed out:

> All in all, it's me as a teacher that makes most decisions about the activities, but we do for example have the 9th grade dance project. Here the students make their own groups, they develop their own dance, and here they really control the whole thing themselves.

The 8th grade teacher went on to explain that students also have a period in the 10th grade where they choose the activities as well.

> We have some student instruction in the 10th grade, where everybody goes together in pairs, and gets to be PE teachers for a lesson. Then they all kind of choose something they are good at, and then its 100% student driven. As teachers we are just there to provide some guidance before the lessons, and check that the plan they have made is somewhat possible to do, but the rest is all up to the students.

The strategies applied by this teacher therefore enabled students to negotiate between themselves when deciding on what and how to do things. As students' ideas and plans can be supervised by the teacher, the strategies themselves also allow for the teacher to help and guide students. However, the statements made by the teacher indicate that he does not actively or systematically utilize these opportunities to help the students as they negotiate in relation to the core curriculum or between themselves. Again, from a Deweyan perspective, this teacher's approaches do not include purposefully inviting students into and guiding mutual reflective processes framing the purposes that guide student learning.

Implicit curriculum negotiation

The teachers suggested that curriculum negotiations of an explicit nature were an important way in which they uphold students' official rights. Nonetheless, *implicit* negotiations also take place, and are in fact more prominent in the material gathered. In this section, three different ways in which student actions can be viewed as forms of implicit curriculum negotiation are presented: (1) student 'off-task' behaviors, (2) students adapting tasks to themselves, and (3) negotiating through bodily positioning.

Curriculum negotiation as 'off-task' behaviors

The empirical material holds many examples of student actions that are not part of solving tasks provided by teachers. Examples from a dance lesson in the 8th grade are presented and discussed in order to show how such actions work as forms of implicit curriculum negotiation.

> The teacher starts of by explaining the content of the lesson. During his explanation, the teacher explicitly states that in dance lessons, students often 'screw up their grades by fooling around and not giving enough effort.' The lesson continues with a traditional demonstrate, explain, and practice logic. During practice, the class is split into groups of six by the teacher, and the teacher provides feedback and encourages students to practice as much as possible. During the lesson, the teacher joins different groups to show new steps or turns and uses groups to demonstrate for the rest of the class. Despite efforts made by the teacher to keep the students on-task, the students often stop practicing, make jokes, laugh, and play around. This happens both when they are told to observe demonstrations and when they are supposed to be practicing the dance.

Despite the teacher's initial comment about potential negative consequences of fooling around, he never actively discourages off-task behavior. Instead, he tries to encourage students to focus on the tasks at hand. The negotiation is thereby constituted by students acting out on their impulse and desire to socialize and have fun, and the teacher's purposeful encouragement to keep focus on tasks. In this sense, the teacher is aware of student off-task behavior but, as he said in his interview, he is reluctant to direct his attention towards the unwanted activity. He claimed that students should be able to have fun, but that he tries not to encourage fooling around. While somewhat ambiguous,

this statement indicates that the teacher accepts the implicit negotiation occurring, and knowing or unknowingly, utilizes these negotiations as a means of keeping off-task behavior at an acceptable level. Interestingly, the students perceived opportunities to engage in off-task behaviors and to socialize and have fun as important for their wellbeing and their ability to learn in PE. As Amelia said when asked if it is important for her to be able to fool around in class: 'Yes because, because it is not fun if we take everything too serious, because then we take all the fun out of it.'

By remaining implicit, the students' view that off-task behavior is important for their well-being and learning remained hidden from the teacher. At the same time, the teachers' view that minimizing off-task behavior is important for student learning was hidden from the students. The teacher did not utilize this opportunity to help students frame purposes that go beyond mere impulse or desire. By remaining implicit, the negotiation thereby concealed aspects of the teaching-learning process viewed as important by the different actors. In this respect, negotiation as off-task behavior fell short in terms of the teacher guiding student reflection.

Curriculum negotiation as students adapting tasks to themselves

Another way that students implicitly negotiate the curriculum is through adapting tasks to themselves. This strategy was common, and all the students either made a given task easier or more difficult. The following interaction occurred between the first author and Robert, a 10th grader who was interviewed about his participation in a floor ball task:

> Robert: Well, I feel that when we have things like leading the ball, and when you can do it on one level, you feel like you could do another level, or like on that difficulty, then you can start challenging yourself.
>
> Researcher: Ok, what do you think about that?
>
> Robert: I think that is good. Everyone has a different achievement level in different things, so if we for example have badminton or other activities, then if you can do a trick opening, then you can move on to trying behind your back, or something like that. Like, if you think that you can manage a task, then you start thinking that you might be able to do more, and then its good if you can push on.

On many occasions, the teachers did not explicitly address student adaptations of tasks. Adaptation simply occurred as students – in a Deweyan sense – tried to match the internal and external conditions. The teachers did at times provide feedback when students made adaptations, either positive or correctional depending upon their perception of the adaptation's appropriateness. While some feedback is thereby explicit, the negotiation constituted by students choosing to adapt tasks to themselves, and the teachers' reflections resulting in either positive or correctional feedback, remained implicit.

In a Deweyan sense, this is another instance where guidance and teacher feedback into the reflective processes of the students could be beneficial. If these processes had been made explicit, and the teacher and students had discussed different options, ways of adapting tasks, and ways of thinking when adopting tasks, the teacher could have helped and guided student decision making. Such help and guidance could have in turn have provided students with valuable insights for tasks in the future. Further, it could have helped students acquire habits of thinking that are beneficial when developing and re-developing purposes guiding further learning.

Curriculum negotiation through bodily positioning

A third way that students enter implicit curriculum negotiations is through displaying different bodily positions. Contrary to the other forms of implicit curriculum negotiation presented in this paper, this form of curriculum negotiation represents a case in point where keeping the negotiation implicit rather than making it explicit, can be beneficial. The following example occurred during the 10th grade lesson:

> The students are given the task of running across the gym on given signals. During the first couple of signals all the students except an injured student participate in the drill. However soon after the drill starts one student

> stops participating. She stands directly across from the teacher, silent and looking down at the floor, her hair covering her face. She continues to stand like this for the remainder of the drill.

When the teacher was asked about this situation in the SRI, he explained that while he noticed her stopping, she is a student that he intentionally does not confront when she does not want to do something. He said: 'She stands right in front of me, you can clearly see that she becomes like, she pulls her hair down, and hides away.' He added; 'She hides, and several of her peers obviously notice. I could have addressed it, but I do not think that would have resulted in her participation.' Further on in the interview, he explained that: 'I don't think that [addressing her inactivity] would have resulted in anything other than creating an unpleasant situation for her. And what would that achieve? Nothing.' During the interview, it becomes clear that his commentary is related to fundamental ideas he has about PE and his teaching.

> My goal is that as many as possible of my students get changed and show up for PE. Earlier in my career I had more students dropping out of entire lessons than I do now. I try to create an environment in PE where it's safe to come, to get changed and to participate. That's the goal, and I think I have managed that.

A key point with respect to the running drill incident is that the student does negotiate her own curriculum through bodily positioning clearly signaling her own desire. Through such bodily positioning, she signals her desire not to be noticed and 'convinces' the teacher not to comment on her behavior. From a Deweyan point of view, this example exemplifies the importance of teachers being intelligently aware of the capacities, needs, and past experiences of their students. As the teacher points out, forcing a student into doing something she does not want to do, could potentially lead the student to learn that her opinion and choices do not matter within this context. While keeping the negotiation process implicit and not directing more attention to her, and by complying with the student's bodily expressed desire, the teacher intends to teach the student that the PE context is safe. If successful, this choice could potentially be crucial for her further development. This example thereby exemplifies a setting where the negotiation seems to benefit from being kept implicit rather than being made explicit.

Discussion

When conducting a theoretical analysis of the results of curriculum negotiation against the background of PE literature, several of the findings aligned with previous studies (e.g. Enright and O'Sullivan 2010; Mitchell, Gray, and Inchley 2015; Guadalupe and Curtner-Smith 2019a, 2019b). Both teachers facilitated student participation in explicit forms of curriculum negotiation. Here, as suggested by Smith, Green, and Thurston (2009), democratization, informalization and providing students with a means of participating in choosing activities are promoted. At the same time, both teachers seemed hesitant to let democratic processes govern 'too much.' They shared Brock, Rovegno, and Oliver (2009) assertion that students who feel comfortable in PE will make suggestions, while those who do not feel comfortable will not. Making most, or all decisions based on suggestions and inputs from students thereby runs the risk of steering lessons in directions that are more suited to the ones already thriving within this context. It is therefore possible to view the teachers' facilitation of explicit curriculum negotiations as an attempt at balancing potential rewards with potential pitfalls. This results in students feeling that while they have a voice in certain aspects of PE, teachers make most of the decisions.

Implicit modes of curriculum negotiation presented in the literature (e.g. Amade-Escot 2006; Barker and Annerstedt 2016), such as increasing or reducing task complexity, fooling around, or refusing to participate are also prominent in our findings. The example of the 10th grade girl not participating, the example of 8th graders' 'off-task' behaviors, and the numerous examples found of students increasing or reducing complexity of tasks, can all be viewed as 'positive or negative,' 'student initiated' forms of negotiation (Wahl-Alexander, Curtner-Smith, and Sinelnikov 2016). Viewed in this light, increasing the complexity of tasks is likely to be viewed as a positive

negotiation, while decreasing complexity is likely to be seen as negative. Our findings from the 8th grade dance lesson provide an alternative reading to the normative categorization presented in the literature. Our interpretation is that being able to socialize, laugh and talk during practice, are important for students' wellbeing and enjoyment of PE, which in turn are important for engagement and ultimately learning (e.g. Mitchell, Gray, and Inchley 2015; Howley and Tannehill 2014).

When conducting a theoretical analysis of the results through a Deweyan framework, we are encouraged to question the categorization of positive or negative negotiations even further. From a Deweyan point of view, reducing complexity of a task can be just as important as increasing complexity in terms of learning. The negotiation processes observed clearly involve students matching their internal conditions with the external conditions of learning situations. These opportunities for matching are evident in the student driven dance project, the student driven lessons, the ability for students to make suggestions and adapt tasks to themselves. Without such opportunities, it is likely that many of the situations would result in students learning what they cannot do, rather than what they can do. However, when viewed from a Deweyan perspective, there seems to be significant potential missed in relation to explicit and implicit forms of negotiations. This is especially true in terms of utilizing situations as starting points for individual and mutual discussions and reflections revolving around the purposes that frame student learning processes. When such discussions fail to occur, the students miss having a teacher guide their reflective processes. This further disadvantages students as they do not learn how to develop and re-develop their own purposes.

At the same time, it is important to be aware that not all forms of negotiation necessarily benefit from being made explicit. In some instances, such as the example of the 10th grade girl 'hiding' in her hair, the implicit nature of the negotiation seemed to be beneficial. In instances where teachers do keep negotiations implicit, they need to do so in intelligent ways. Teachers need to be aware of the capacities, needs, and past experiences of students and be confident that leaving some negotiations implicit is beneficial in terms of further development and growth.

Concluding remarks

In this paper we have explored student participation in curriculum negotiation in Norwegian PE through a specific learning theoretical lens. By gathering and analyzing material from the Norwegian PE context, we have shown that students participate in curriculum negotiations in several ways. They participate in explicit curriculum negotiation strategies which mainly seem initiated or encouraged by the teachers as attempts to engage and motivate students. In addition to explicit strategies, we have shown how students also participate in implicit negotiations. Our main recommendation for practitioners is that they recognize both explicit and implicit negotiation processes, and that they view these processes as learning opportunities. Practitioners have an opportunity to utilize negotiations as opportunities to teach students ways of thinking critically and reflectively and to help students develop plans and methods that guide their own learning. In other words, teachers can help students learn to act intelligently, and not merely on impulse or desire. We also recommend that further research focusing on the negotiation processes occurring within the PE context is needed. While there exist several well documented methods and recommendations for implementing purposeful curriculum negotiation in PE, we think there is a need for more theoretically driven research exploring negotiations occurring outside interventions. Our hope is that this paper can inspire such investigations, and we suggest that the Deweyan perspective can be a possible framework for conducting such research.

Disclosure statement

No potential conflict of interest was reported by the author(s).

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Appendices

Appendix 1: Example of search log

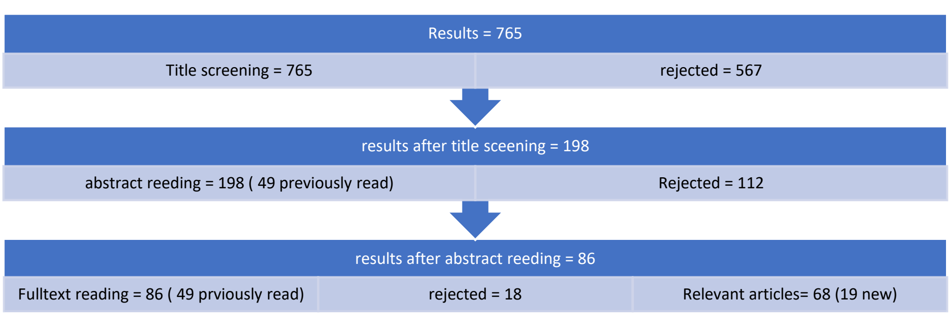
<u>*Web of science*</u>, search log 21.10.2020

<u>Applied inclusion criteria:</u> peer reviewed, published after 2000, written in English

Search words:	results
TS = ("student voice" AND "physical education")	117
TS = ("curriculum negotiation" AND "physical education")	26
TS = ("Peer assessment" AND "physical education")	80
TS = ("self assessment" AND "physical education")	289
TS = (Choice AND "student participation" AND "physical education")	49
TS = ("Decision making" AND "Student participation" AND "Physical education")	56
TS = ("Student choice" AND "physical education")	267
Combined with duplicates removed	765

<u>Applied exclusion criteria:</u> Title indicating not school related, Abstract reading revealing articles are not related to Physical Education (or similar subjects), Full text reading reveal that the article does not focus on student choice, voice or decision making in Physical Education.

<u>Simple flow chart:</u>



In this search 68 articles were found to be of relevance for the dissertation. Here 19 of the results were new results not found in previous systematic searches.

Appendix 2: Pilot 1 - information and consent form

Forespørsel om deltakelse i forskningsprosjektet

"Elevmedvirkning i kroppsøvingsfaget"

Dette prosjektet er et doktorgradsprosjekt ved Norges Idrettshøgskole og har ingen andre eksterne oppdragsgivere. Studien har til hensikt å undersøke elevmedvirkning i kroppsøvingsfaget. I denne delen av studien innebærer dette at en forsker vil gjennomføre et pilotintervju med deg. Intervjuet vil bli tatt opp på lydbånd, og setter søkelys på tematikken elevmedvirkning i din undervisning.

Lydopptak vil slettes, og all informasjon anonymiseres innen prosjektslutt. Både skoler og informanter som deltar vil behandles konfidensielt i prosjektet, og det er kun forskerne tilknyttet prosjektet som vil få tilgang til materialet som innhentes. Ingen enkeltpersoner vil kunne gjenkjennes i den endelige rapporten. Det er frivillig å delta i studien, og du kan når som helst trekke ditt samtykke uten å oppgi noen grunn. Dersom du trekker deg, vil alle opplysninger om deg bli slettet. Prosjektet er meldt til Personvernombudet for forskning, Norsk samfunnsvitenskapelig datatjeneste AS. Dersom du har ytterligere spørsmål til studien, ta kontakt med:

Stipendiat: Eirik Aarskog
e-post: Eirik.aarskog@nih.com
tlf: 94783590

Hovedveileder: Jorunn Spord Borgen
e-post: Jorunn.spord.borgen@nih.no
tlf: 40875564

Samtykke til deltakelse i studien

Jeg har mottatt skriftlig informasjon om studien, og er villig til å delta i studiens;

____

(Signert av prosjektdeltaker, dato)

Appendix 3: Pilot 2 – information and consent form

Forespørsel om deltakelse i forskningsprosjektet

"Elevmedvirkning i kroppsøvingsfaget"

Dette prosjektet er et doktorgradsprosjekt ved Norges Idrettshøgskole og har ingen andre eksterne oppdragsgivere. Studien har til hensikt å undersøke elevmedvirkning i kroppsøvingsfaget. I denne delen av studien innebærer dette at forsker(e) vil observere deg i en kroppsøvingstime, og ta notater fra det som observeres. Fokuset er på det som blir sagt og gjort i timen.

Notater vil slettes, og all informasjon anonymiseres innen prosjektslutt. Både skoler og informanter som deltar vil behandles konfidensielt i prosjektet, og det er kun forskerne tilknyttet prosjektet som vil få tilgang til materialet som innhentes. Ingen enkeltpersoner vil kunne gjenkjennes i den endelige rapporten. Det er frivillig å delta i studien, og du kan når som helst trekke ditt samtykke uten å oppgi noen grunn. Dersom du trekker deg, vil alle opplysninger om deg bli slettet. Prosjektet er meldt til Personvernombudet for forskning, Norsk samfunnsvitenskapelig datatjeneste AS. Dersom du har ytterligere spørsmål til studien, ta kontakt med:

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tlf: 40875564

Samtykke til deltakelse i studien

Jeg har mottatt skriftlig informasjon om studien, og er villig til å delta i studiens;

____

(Signert av prosjektdeltaker, dato)

Appendix 4: Principal and Teacher consent form

Forespørsel om deltakelse i forskningsprosjektet
"Elevmedvirkning i kroppsøvingsfaget"

Dette prosjektet er et doktorgradsprosjekt ved Norges Idrettshøgskole og har ingen andre eksterne oppdragsgivere. Studien har til hensikt å undersøke elevmedvirkning i kroppsøvingsfaget. Studien forløper seg over tre faser. I første fase vil forsker(e) observere i kroppsøvingstimer. I fase to vil kroppsøvingstimene i tillegg bli filmet. I fase tre vil noen elever intervjues med utgangspunkt i situasjoner som er filmet.

Fase 1: 3-4 undervisningstimer	Fase 2: 1 undervisningsøkter	Fase 3: 1 dager
Observasjon av kroppsøvingstimer.	**Filmopptak av kroppsøvingstimer.**	**Intervjuer med lærer. (60 min)**

Før observasjonen starter vil eleven/foresatte skrive under et samtykkeskjema for å delta i studien. Tidspunkt for de ulike fasene vil avtales mellom forskere og skole. I første fase vil det tas notater i forhold til elever som har samtykket til studien. I fase to vil undervisning i klassene filmes. I fase tre får du se noen utvalgte filmklipp og vil intervjues med bakgrunn i disse. Intervjuene blir tatt opp på bånd. For de elevene som ikke ønsker å delta i fase to og tre vil det utarbeides et alternativt undervisningsopplegg.

Lydopptak, filmklipp og notater vil kun bli brukt av forskere i studien og skal deretter slettes. All informasjon anonymiseres. Både skoler og informanter som deltar vil behandles konfidensielt i prosjektet, og det er kun forskerne tilknyttet prosjektet som vil få tilgang til materialet som innhentes. Ingen enkeltpersoner vil kunne gjenkjennes i den endelige rapporten.

Det er frivillig å delta i studien, og du kan når som helst trekke ditt samtykke uten å oppgi noen grunn. Dersom du trekker deg, vil alle opplysninger om deg bli slettet. Prosjektet er meldt til Personvernombudet for forskning, Norsk samfunnsvitenskapelig datatjeneste AS. Dersom du har ytterligere spørsmål til studien, ta kontakt med:

Stipendiat: Eirik Aarskog
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tlf: 94783590

Hovedveileder: Jorunn Spord Borgen
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tlf: 40875564

Samtykke til deltakelse i studien

Jeg har mottatt skriftlig informasjon om studien, og er villig til å delta i studiens;

(Signert av prosjektdeltaker, dato)

Appendix 5: Student consent form

Forespørsel om deltakelse i forskningsprosjektet *"Elevmedvirkning i kroppsøvingsfaget"*

Dette prosjektet er et doktorgradsprosjekt ved Norges Idrettshøgskole og har ingen andre eksterne oppdragsgivere. Studien har til hensikt å undersøke elevmedvirkning i kroppsøvingsfaget. Studien forløper seg over tre faser. I første fase vil forsker(e) observere i kroppsøvingstimer. I fase to vil kroppsøvingstimene i tillegg bli filmet. I fase tre vil noen elever intervjues med utgangspunkt i situasjoner som er filmet.

Fase 1: **3-4 undervisningstimer**	**Fase 2:** **1 undervisningsøkter**	**Fase 3:** **3 dager**
Observasjon av kroppsøvingstimer.	**Filmopptak av kroppsøvingstimer.**	**Intervjuer med elever. (45 min)**

Før observasjonen starter vil eleven/foresatte skrive under et samtykkeskjema for å delta i studien. Tidspunkt for de ulike fasene vil avtales mellom forskere og skole. I første fase vil det tas notater i forhold til elever som har samtykket til studien. I fase to vil undervisning i klassene filmes. I fase tre får du se noen utvalgte filmklipp og vil intervjues med bakgrunn i disse. Intervjuene blir tatt opp på bånd. For de som ikke ønsker å delta i fase to og tre vil det utarbeides et alternativt undervisningsopplegg.

Lydopptak, filmklipp og notater vil kun bli brukt av forskere i studien og skal deretter slettes. All informasjon anonymiseres. Både skoler og informanter som deltar vil behandles konfidensielt i prosjektet, og det er kun forskerne tilknyttet prosjektet som vil få tilgang til materialet som innhentes. Ingen enkeltpersoner vil kunne gjenkjennes i den endelige rapporten.

Du kan delta i første fase eller i alle tre faser. Det er frivillig å delta i studien, og du kan når som helst trekke ditt samtykke uten å oppgi noen grunn. Dersom du trekker deg, vil alle opplysninger om deg bli slettet. Prosjektet er meldt til Personvernombudet for forskning, Norsk samfunnsvitenskapelig datatjeneste AS. Dersom du har ytterligere spørsmål til studien, ta kontakt med:

Stipendiat: Eirik Aarskog
e-post: Eirik.aarskog@nih.com
tlf: 94783590

Hovedveileder: Jorunn Spord Borgen
e-post: Jorunn.spord.borgen@nih.no
tlf: 40875564

Samtykke til deltakelse i studien

Jeg har mottatt skriftlig informasjon om studien, og er villig til å delta i studiens;

Fase 1 ☐
Fase 2 ☐
Fase 3 ☐
(Sett kryss for fasene du gir samtykke til.)

____

(Signert av prosjektdeltaker, dato)

Jeg har mottatt skriftlig informasjon om studien, og samtykker til at mitt barn ved

Navn:___________________________ klasse:__________________ kan delta i studien i henhold til avkryssede faser og slikt den er beskrevet i forespørsel om deltagelse brev.

____

(Signert av foresatt, dato)

Appendix 6: Pilot 1- Interview guide (English translation of Norwegian guide)

Introduction

- Wishing the participant welcome and present myself
- Thanking participant for taking the time to do the interview
- Inform the participant about the purpose of the interview (pilot). Inform them that the interview will be recorded and transcribed, but that the sound recording will be deleted after the transcription, and that the interview data will be used for pilot purposes. Further inform about my duty to confidentiality, and that the material collected will be anonymized.
- Remind participants that the research project has been reported to NSD.

Theme	**Research question**	**Interview question**
Background information/warm up questions	Warm up questions	How did you become a PE teacher? What school subjects and classes do you teach? How long have you been working at this school?
The phenomenon of student participation (elevmedvirkning in Norwegian education)	How does the teacher understand student participation (elevmedvirkning) as part of their teaching	1. In the core curriculum, student participation is a central educational principle. What thoughts do you have about this principle? - Purpose? - Implementation? 2. To be able to take part in educational decision-making is a central aspect of the principle of student participation. What do you think about student participating in educational decision-making in the subject of PE? 3. In the principle of student participation, the core curriculum states that through student participation student are to become more aware of their own learning processes, and that it will strengthen their ability to make conscious choices. What do you think about this statement?

Participation in planning of PE	How does the teacher plan their PE lessons?	- Turning to the planning of PE lessons, can you tell me a bit about how you plan your PE lessons? o Can you from an example of a competence goal explain how you would plan lessons towards this goal o How do you decide what is to be the outcome when student have learnt the goal? o Do you plan on your own or in a collegium? o Do you have region plans that help you in your planning? o Are students involved in the planning of lessons?
Sharing learning criteria	How does the teacher specify the learning criteria in the subject?	- How are the student made aware of what are the learning criteria/goal of PE as a school subject? - How do you speak to students about the goals of each PE lesson? o Are students involved in negotiating the goals and/or criteria of lessons? - How do you make students understand the assessment criteria of different educational goals? o Are the students involved in forming such criteria?
Implementation of PE lessons	How is the PE lessons implemented in regards to assessment and support for student self-regulation.	- Can you describe how you construct and implement a typical PE lesson? - Is there a difference in how you work with the students in different stages of the construction and implementation of lessons? − Planning phase − Implementation phase − Student reflections after learning activities - Can you tell me a bit about how you implement assessment for learning in your lessons? - What do you think about the fact that "effort" is something student should learn and something you need to assess? − How do you understand the term effort in relation to the subject of PE? − what do you look for when assessing effort? − What "place" has effort in your assessment practices
Student participation in assessment	How does the teacher facilitate student self and peer assessment in their own learning?	- How do you use different strategies that you think support students becoming involved in their own learning processes, and develop the ability to make conscious choices?

		− Are there some strategies that you find more useful than others? − Can you describe in a bit more detail how you implement such strategies? - Do you have experiences with students forming their own educational goals? - Do you have experiences with providing students the task of assessing themselves or peers during and/or after PE lessons? − What purpose do you think student participation in forming educational goals and self-assessment can have for student learning? − If experiences, how do you think such strategies work to support student learning in PE?

Concluding remarks

- Do you have anything that you want to add that you have not been asked in relation to student participation (elevmedvirkning)
- Thank the participant for the interview, and remind participant about my confidentiality, that the material is anonymized, and that the participant has the right to withdraw their consent to participate at any time and without presenting a reason. If this is done, everything provided will be deleted.

Appendix 7: Pilot 2- Observation guide (English translation of Norwegian guide)

- Keywords and attempts at transcribing short dialogs will be noted in a fieldnote journal during the observations.
- Detailed filed notes will be transcribed immediately after each observation.
- The focus of the observations is to identify and transcribe episodes and situations that can contribute to insights about the decision-making processes occurring within the PE lessons, and how student participate in these processes.

First observation:

Observational focus: The communicative processes that occur between the teacher and students.

Observational plan: Observe from the role of assistant teacher

Start of the lessons

keywords:

- How does the teacher start the lesson?
- Are the students active/participatory/communicative/silent?
- Dialog vs monolog
- Does there seem to be routines?
- Teachers body language/gestures?
- Student responses/opportunities to respond?

During the lesson

Keywords

- How does the teacher communicate with the students?
- How is feedback/guidance or instruction delivered to groups of student
- How does the teacher communicate with individual students?
- What form does the communication take (monolog vs dialog)
- What is said and what is not being said?

Second observation

Observational focus: The communicative processes that occur between students and students' individual reflections

Observational plan: Participate as co-student and follow different groups, and students, asking questions and listening to how they communicate, and participate in the communication.

Keywords:

- What does the students talk about?
- Do the students make decision when talking/discussing?
- What decision are made when student talk and discuss?
- How are these decisions made? Consensus? Individually? Popularity? Status?
- Do students seem to make their own decisions on their own?
- How do they make such decisions? (need to ask what students are thinking)

Appendix 8: Student SRI Interview guide – English translation

Before starting audio recording:

- Wish participant welcome, offer something to drink, and present myself again.
- Remind participant about the purpose of the interview, and here make it clear that my main interest is in the students experiences in the video recorded PE lesson. Also remind participant of my obligation to confidentiality, and who will be given insight into the material.
- Provide information about the interview being audio recorded, and again with words they can understand explain how these audio recordings will be stored, and that the students will be anonymized in the final report.
- Provide information that the students can withdraw, at any point, both now before, during and after the interview, without providing a reason. Inform them that it is voluntary to participate, and that all collected material will be deleted if they withdraw.

Introduction:
Background information questions:
Age:
How old are you?
Gender:
What is your gender?
Class level:
What class do you go to?
Past time interests:
Can you tell me something about your past time interests?

1. **Implementation of PE**

I will now show you some video clips from the video recorded lesson, and I want you to think back and try to remember what you were thinking in these situations.

1.1 ***Questions for video clips***

The student is shown situations from the lesson, and then asked questions in relation to these clips. (Some of the questions will not be relevant in relation to certain clips)

1.1a What is the student thinking in the situations

Can you tell me a bit about what happened in the clip we just saw?

Possible follow ups:

- What is it that you are trying to do here? Can you say something about what you were thinking here?
- What do you think about the situations now?
- Did you make any choices here?
- Do you think you could have done anything different? What choices might that be?
- What do you think would have happened had you made such alternative choices?

1.1b What is the student's purpose with what the student is doing?

If we go back to the situation we just saw, is there anything in particular that you are practicing or trying to accomplish?

- Can you explain a bit more?
- How, what, why?

1.1c How does the student assess if they reach their purpose?

Did you manage to do what you intended?

Possible follow ups:

- **How do you know if you managed what you intended?**
  - **Did peers say something?**
  - **Did the teacher say or do something?**
  - **Did you think or feel something?**

1.1d What is the student thinking about the cooperation with the one(s) included in the situation

Can you tell me something about the cooperation with the person(s) you are working with here?

Possible follow ups:

- Is this someone(s) you work with often in PE?
- How do you think you cooperate?
  - Do you make any agreements on how to work together, if so how?
  - What do you think it takes for a cooperation to work properly?
  - Is there anything you wish would have worked better? Why/why not?

Can you tell me something about what the teacher is doing in this situation?

Possible follow ups:

- Was what the teacher did to any help for you or your group?
- If so, what was it that helped?
- What do you think about the teacher acting the way the teacher does?
  - What is good, what is not so good?

1.2 **Questions related to how the lessons ends**

The student is shown a clip of the end of the lesson and is provided questions related to the clip.

1.2a Student thoughts about the end of the lesson

Can you explain a bit about what you are all doing in this situation?

Possible follow ups:

- How do you experience what you do at the end of this lesson?
  - Can you remember what you were thinking there?
  - Does it help you in any way?
    - Learning?
  - Do you ever talk with the teacher about PE after the lessons? In the hallways at school? What do you talk about then? Can you provide some examples?

2. **Planning in PE**

We are now done with viewing the video clips, but I want to ask you some additional questions about how PE is planned.

2.1 ***How do students participate in the planning of PE lessons?***

2.1a Student thoughts about participating in choosing content

Does the teacher ever ask you students about what you want to do in PE?

Possible follow ups:

- At the start of the school year? at the start of periods? before or during lessons?

2.1b Student thoughts about participating in planning PE

Are you students ever involved in planning what happens in PE?

- When, how, can you explain a bit more?

2.1c Student thoughts about participating in deciding what they should learn in PE

Are you students involved in planning what you are to learning in PE, do you think?

Possible follow ups:

- Can you explain a bit more?
- If you could choose, what would you like to learn in PE? can you elaborate?

2.2 ***What does the student perceive was the plan in the video recorded lesson?***

In the lesson video recorded, can you tell me something about what you think was what you were intended to learn in that lesson?

- Can you elaborate?

3. **How Is PE lessons evaluated/assessed by students?**

I would now like to ask you some additional questions about assessment in PE

3a How do student participate in discussions about assessment in PE?

Do you ever talk about assessment in PE?

- What do you talk about when you talk about assessment?
- Can you provide any examples?

3b What do students know about the teachers assessment practices in PE?

Do you know what and how the teacher assesses you in PE?

- Can you elaborate? Do you have any examples?

3c How does the teacher provide feedback to students?

Do you ever get feedback from the teacher in PE?

Possible follow ups:

- What does the teacher commonly say when providing feedback?
- How do you perceive the feedback you get from the teacher?
- Does it help you in any way? How?

3d What occupies student thoughts after a Pe lessons is over?

Can you tell me a bit about what you are most often thinking about after a PE lesson is over? What is your main concern?

- Do you ever think about what you have learned in the lesson?

4. **End of interview**

Is there anything you would like to add that you have not been asked about?
Say thank you, and again remind participant about confidentiality and the possibility of withdrawing consent

Appendix 9: Teacher SRI interview guide – English translation.

<u>Start:</u>

Inform participants about the purpose of the project and the interview. Inform participant about my confidentiality, and the option of withdrawing consent at any time without reason. Here aske whether it is ok to publish grade level the teacher works in, gender, and experience, given that there are only two teachers interviewed. In addition enquiring whether the participant would like to review the transcripts of the interviews after they are transcribed.

Warm up/introduction questions:

Background information - keywords

- Gender?
- Age?
- Education?

Work experience?
How long have you worked as a PE teacher?
How long have you worked at this school?

Pastime interest?
What is your pastime interest/hobbies?
- *Can you explain a bit more?*

<u>1 Planning of PE curriculum</u>

1a- How is PE planned at your school?

Can you tell me a bit about how PE is planned at your school?
- *Is there any collegial planning done within the school?*
- *Do you cooperate with other schools in your school district?*
- *Are there any other forms of cooperation in relation to planning PE?*
- *Are there any special considerations in relation to the schools overall planning you need to adhere to?*

Can you tell me a bit about how you personally plan your PE teaching?
- *Year/periods/specific lessons?*

<u>2 Implementation of PE lessons</u>

- I will now show you some video clips from the lesson video observed, and I want you to try to think back to what you were thinking in these situations

2.1 General questions to all video segments:

2.1.1 What did the teacher think in the specific situation?

Can you describe what you were thinking about what occurred in this situation?

- *What did you focus on? Whom did you focus on? why?*
- *What choice options did you think you had in this situation?*
- *Did you choose to overlook some things? What? Why?*

2.1.2 Address the «room» provided for student to participate on their own terms, and try to get hold of teacher reflections about this.

2.1.2a When you found yourself in this situation, what were you thinking about the things occurring?

2.1.2 b Do you make any deliberations about the students that disengage from the lesson?

- *Did you deliberately choose not to "see" / Comment / make contact with these students? Why?*

2.1.2 c Do you make any deliberations about the students that do other things than what they are tasked to do in the lesson?

- *Did you deliberately choose not to "see" / Comment / make contact with these students? Why?*

2.1.3 Assessment/evaluation after the lesson

When a lesson is done, do you make any notes, keywords or similar things about situations like this?

- *What do you think you were thinking about student learning in these situations?*
- *What reflections due you now make seeing these situations in relation to student learning?*

2.2 Questions for specific teachers to specific video clips

2.2.1 10th grade teacher:

-What was the teacher thinking about the two students disengaging form the lesson

Can you describe what you were thinking in this situation?

- *What choice options did you think you had here?*
- *What made you choose how you responded to this situation?*
- *Why did you choose to do what you did?*

2.2.2 8th grade teacher

-What meaning does the teacher ascribe to the term " stress down"

In these situations, you tell students to stress down at several points in time. Can you tell me a bit about why you choose to focus on this? What happens when you ask students to "stress down"

- *Do you have any ideas about why this seems to work? (the students in the clip calm down, and practice more focused)*

- *Do you have any experiences with other types of feedback that does not work as well as this?*
- *Do you have any thoughts about why such feedback does not work?*

3. Student participation in planning lessons?

3.1 How are students involved in the planning of PE?

3.1 a Can you tell me a bit about the students roles in the planning of your PE teaching?

- *In the planning phases when plans are made about different periods/lessons*
- *Do you facilitate or encourage students to participate with suggestions in relation to the content of PE periods/lessons?*
- *Do students provide ideas in relation to the content of PE? If so what?*
- *Are some students more active then others in terms of providing suggestions?*
- *If so, how do you handle this?*

3.2 Is there different plans for different classes?

3.2a Do you make different plans for different classes in the same grade level?

3.2 b What do you put focus on when planning PE?

- class composition?

- What they know form previous PE?

-Suggestions for students?

-What students are supposed to learn?

3.3 What was the plan in the lesson video recorded?

3.3 a Can you tell me a bit about what was planned for the lesson video recorded?

- *Was what you did in accordance with what was planned in advance?*

3.3 ***b In relation to the plan for the lesson, what was the planned purpose with the lesson?***

- *Can you tell me something more about how you think the lesson wnt in relation to your plan?*

4 How the teacher ends the lesson

4.1 What is the teachers thoughts about how the lesson ends?

The teacher is shown a video clip of the end of the lesson.

4.1 a ***Can you explain a bit about how you end the lesson?***

- *Can you elaborate a bit about why you do what you do?*

4.1 B Do students sometimes make conntack and ask you questions at the end or after the a lesson in PE?

- *What do you talk about then? Examples?*
- *Do you plan for time to answer such questions?*
- *Do students make contact at other times during the school day to talk to you about PE?*

5 How does the teacher assess student learning in PE?

5.1 Can you tell me a bit about how you work in relation to assessing students in PE?

- *In the lessons?*
- *After lessons?*
- *Are the students involved in the assessment processes that occur in PE?*

5.2 ***How do you talk to students about assessment in PE?***

- *At the start of periods/lessons?*
- *During lessons?*
- *At the end or after lessons?*

5.3 ***What do you think works, and what would you say is the most challenging with assessment of students in PE?***

6 Ending the interview:

Is there anything you would like to add in relation to the topics we have discussed that you feel you haven't been able to explain? Anything unrelated that you would like to add in relation to PE, or to being a PE teacher?

Say thank you for participating, and remind the participant again about my obligation to confidentiality, the opportunity to withdraw at any time, and that I can send transcripts if the teacher wants to read the transcripts. End by thanking again for the cooperation.

Appendix 10: First approval from NSD

Norsk samfunnsvitenskapelig datatjeneste AS
NORWEGIAN SOCIAL SCIENCE DATA SERVICES

Harald Hårfagres gate 29
N-5007 Bergen
Norway
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Org.nr. 985 321 884

Eirik Aarskog
Seksjon for kroppsøving og pedagogikk Norges idrettshøgskole
Postboks 4042, Ullevål stadion
0806 OSLO

Vår dato: 11.01.2016 Vår ref: 45954 / 3 / LB Deres dato:
Deres ref:

TILBAKEMELDING PÅ MELDING OM BEHANDLING AV PERSONOPPLYSNINGER

Vi viser til melding om behandling av personopplysninger, mottatt 03.12.2015. Meldingen gjelder prosjektet:
45954 I elevmedvirkningens navn - elevmedvirkning i kroppsøving, hva er egentlig det?
Behandlingsansvarlig: Norges idrettshøgskole, ved institusjonens øverste leder
Daglig ansvarlig: Eirik Aarskog
Personvernombudet har vurdert prosjektet, og finner at behandlingen av personopplysninger vil være regulert av § 7-27 i personopplysningsforskriften. Personvernombudet tilrår at prosjektet gjennomføres.

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

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

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

Personvernombudet vil ved prosjektets avslutning, 31.07.2019, rette en henvendelse angående status for behandlingen av personopplysninger.

Vennlig hilsen
Katrine Utaaker Segadal
Lene Christine M. Brandt
Kontaktperson: Lene Christine M. Brandt tlf: 55 58 89 26

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

Vedlegg: Prosjektvurdering
Personvernombudet for forskning

Prosjektvurdering - Kommentar

Prosjektnr: 45954

Data innsamles og registreres ved hjelp av lyd- og videoopptak. Personvernombudet minner om at deltakelse er frivillig og vi forutsetter at det legges til rette for at det kun registreres personopplysninger (inkl. ansikt og stemmer) om barn som har samtykket til å delta, jf. telefonsamtale med Eirik Aarskog 11.01.2016. Det anbefales at barn som ikke skal delta i prosjektet gis et reelt alternativ, ved at de for eksempel får undervisning i et annet rom/hos parallellklasse mens opptakene pågår.

Utvalget informeres skriftlig og muntlig om prosjektet og samtykker til deltakelse. Informasjonsskrivene er godt utformet, såfremt setningen om NSD omskrives slik at den bare lyder som følger: "Prosjektet er meldt til Personvernombudet for forskning, Norsk samfunnsvitenskapelig datatjeneste AS". Videre ber vi om at avsnittet om "Frivillig deltakelse" i skrivet til elev/foresatte omskrives (jf. telefonsamtale og i tråd med forutsetning ovenfor) slik at avsnittet formuleres som følger: "Det er frivillig å delta i studien, og du kan når som helst trekke ditt samtykke uten å oppgi noen grunn. Dersom du trekker deg, vil alle opplysninger om deg bli slettet". Resten av avsnittet slettes, og det opplyses evt. i stedet videre om at det er lagt opp til et alternativ undervisningsopplegg for de som ikke ønsker å delta (se ovenfor). Dette slik at deltakelse i forskningen oppleves reelt frivillig.

Merk at når barn skal delta aktivt, er deltagelsen alltid frivillig for barnet, selv om de foresatte samtykker. Barnet bør få alderstilpasset informasjon om prosjektet, og det må sørges for at de også forstår at deltakelse er frivillig og at de når som helst kan trekke seg dersom de ønsker det.

I lys av prosjektets tematikk tas det høyde for at det vil kunne fremkomme sensitive opplysninger om helseforhold, jf. personopplysningsloven § 2 nr. 8 c).

Personvernombudet legger til grunn at forsker etterfølger Norges idrettshøgskole sine interne rutiner for datasikkerhet. Dersom personopplysninger skal lagres på mobile enheter, bør opplysningene krypteres tilstrekkelig.

Forventet prosjektslutt er 31.07.2019. Ifølge prosjektmeldingen skal innsamlede opplysninger da anonymiseres. Anonymisering innebærer å bearbeide datamaterialet slik at ingen enkeltpersoner kan gjenkjennes. Det gjøres ved å:
slette direkte personopplysninger (som navn/koblingsnøkkel)
slette/omskrive indirekte personopplysninger (identifiserende sammenstilling av bakgrunnsopplysninger som f.eks. skole, alder og kjønn) - slette digitale lyd- og videoopptak

Vi gjør oppmerksom på at dersom intervjuguidene endrer seg i stor grad i forhold til utkastene som er vedlagt meldingen, må disse ettersendes personvernombudet i god tid før intervjuene gjennomføres (send til personvernombudet@nsd.no).

Appendix 11: Last approval from NSD

Prosjekttittel

Elevmedvirkning i kroppsøving

Referansenummer

784577

Registrert

13.12.2019 av Eirik Aarskog - eirikaa@nih.no

Behandlingsansvarlig institusjon

Norges idrettshøgskole / Institutt for lærerutdanning og friluftsliv

Prosjektansvarlig (vitenskapelig ansatt/veileder eller stipendiat)

Eirik Aarskog, eirik.aarskog@nih.no, tlf: 94783590

Type prosjekt

Forskerprosjekt

Prosjektperiode

03.12.2015 - 31.12.2020

Status

14.02.2020 - Vurdert

Vurdering (1)

14.02.2020 - Vurdert

BAKGRUNN

Behandlingen av personopplysninger ble opprinnelig meldt inn til NSD 03.12.2015 (NSD sin ref: 45954) og vurdert under personopplysningsloven som var gjeldende på det tidspunktet. 13.12.2019 meldte prosjektleder inn en endring av prosjektet. Av dokumentasjonshensyn etter krav fra behandlingsansvarlig institusjon vil navnelister og anonymiserte transkripsjoner oppbevares i fem år etter prosjektslutt frem til 31.12.2025. Det er vår vurdering at behandlingen/hele prosjektet vil være i samsvar med den gjeldende personvernlovgivningen, så fremt den gjennomføres i tråd med det som er dokumentert i meldeskjemaet 14.02.2025 med vedlegg, samt i meldingsdialogen mellom innmelder og NSD.

MELD VESENTLIGE ENDRINGER

Dersom det skjer vesentlige endringer i behandlingen av personopplysninger, kan det være nødvendig å melde dette til NSD ved å oppdatere meldeskjemaet. Før du melder inn en endring, oppfordrer vi deg til å lese om hvilke type endringer det er nødvendig å melde: https://nsd.no/personvernombud/meld_prosjekt/meld_endringer.html. Du må vente på svar fra NSD før endringen gjennomføres.

LOVLIG GRUNNLAG

Prosjektet har innhentet samtykke fra de registrerte til behandlingen av personopplysninger. Vår vurdering er at prosjektet legger opp til et samtykke i samsvar med kravene i art. 4 og 7, ved at det er en frivillig, spesifikk, informert og utvetydig bekreftelse som kan dokumenteres, og som den registrerte kan trekke tilbake. Lovlig grunnlag for behandlingen vil dermed være den registrertes samtykke, jf. personvernforordningen art. 6 nr. 1 bokstav a.

PERSONVERNPRINSIPPER

NSD vurderer at den planlagte behandlingen av personopplysninger vil følge prinsippene i personvernforordningen om: - lovlighet, rettferdighet og åpenhet (art. 5.1 a), ved at de registrerte får tilfredsstillende informasjon om og samtykker til behandlingen - formålsbegrensning (art. 5.1 b), ved at personopplysninger samles inn for spesifikke, uttrykkelig angitte og berettigede formål, og ikke viderebehandles til nye uforenlige formål - dataminimering (art. 5.1 c), ved at det kun behandles opplysninger som er adekvate, relevante og nødvendige for formålet med prosjektet - lagringsbegrensning (art. 5.1 e), ved at personopplysningene ikke lagres lengre enn nødvendig for å oppfylle formålet

DE REGISTRERTES RETTIGHETER

Så lenge de registrerte kan identifiseres i datamaterialet vil de ha følgende rettigheter: åpenhet (art. 12), informasjon (art. 13), innsyn (art. 15), retting (art. 16), sletting (art. 17), begrensning (art. 18), underretning (art. 19), dataportabilitet (art. 20). NSD vurderer at informasjonen som de registrerte mottok oppfylte lovens krav til form og innhold i det gjeldende regelverk på tidspunktet. Vi minner om at hvis en registrert tar kontakt om sine rettigheter, har behandlingsansvarlig institusjon plikt til å svare innen en måned.

FØLG DIN INSTITUSJONS RETNINGSLINJER

NSD legger til grunn at behandlingen oppfyller kravene i personvernforordningen om riktighet (art. 5.1 d), integritet og konfidensialitet (art. 5.1. f) og sikkerhet (art. 32). For å forsikre dere om at kravene oppfylles, må dere følge interne retningslinjer og eventuelt rådføre dere med behandlingsansvarlig institusjon.

OPPFØLGING AV PROSJEKTET

NSD vil følge opp underveis (hvert annet år) og ved planlagt avslutning for å avklare om behandlingen av personopplysningene er avsluttet/pågår i tråd med den behandlingen som er dokumentert. Lykke til med prosjektet! Kontaktperson hos NSD: Kajsa Amundsen Tlf. Personverntjenester: 55 58 21 17 (tast 1)

Eirik Aarskog // ‘The How of Decision-Making.’