

This is the final text version of the article, and it may contain minor differences from the journal's pdf version. The original publication is available at www.humankinetics.com: [http://dx.doi.org/10.1123/apaq.2013-0105](http://dx.doi.org/10.1123/apaq.2013-0105)
Abstract
The purpose of this study was to investigate what adapted physical activity (APA) students learn from their practicum experiences. One cohort of APA students participated, and data were generated from an action research project that included observations, reflective journals and a focus group interview. The theoretical framework for the study was Dewey’s and Wackerhausen’s theories of reflections. The findings show the objects of students’ reflections, what kind of conceptual resources they draw on while reflecting, and what their knowledge interests are. In addition two paradoxes are identified, namely the tension between reflecting from and on own values, and how practicum as a valued experience of reality can become too difficult to handle. In conclusion, we reflect on how practicum learning can be facilitated.

Key words: Practicum, students’ learning, action research, Dewey,
Providing students with practicum experiences is an integral part of many adapted physical activity (APA) and adapted physical education (APE) programs\(^1\). In this article we report the findings from an action research project which aimed to facilitate APA students’ learning through practicum.

Favorable attitudes towards pupils with disabilities are considered important for successful inclusion (Kozub & Lienert, 2003). Therefore, most of the research on practicum in APA has been studied by quantitative investigations of changes in students’ attitudes towards teaching pupils with disability (e.g. Hodge & Jansma, 1998; Hodge, Davis, Woodward & Sherrill, 2002; Rowe & Stutts, 1986). The topic has been reviewed by Kozub and Linert (2003) who founded that there are mixed findings with regards to the potential of practicum to impact students’ attitudes and therefore concluded that there is a need for “more study with respect to the quality of instruction and practicum experiences” (p. 332).

Drawing on qualitative research methodology, Connolly (1994) analyzed the reflective journals of physical education teacher education (PETE) students taking part in an APE course. The journals of 10 students were used for analysis, because these journals were considered to be authored in an honest, sensitive, and reflective manner. The analysis uncovered 6 sequential themes concerning the students’ experiences of disability as difference: from the uneasiness experienced by students upon anticipating difference, through sharing an experience of difference, to finally recognizing how the experience of differences changed the students’ perceptions on teaching pupils with disabilities in PE. Later, Hodge, Tannehill & Kluge (2003) investigated the meanings PETE students’ assigned to their APE practicum experiences. 10 PETE majors submitted weekly journals where they provided detailed accounts of critical incidents and reflected on their experiences with these incidents. Through qualitative analysis, the authors identified 11 themes, which pertained to the content and managing of activities, characteristics of pupils the students worked with (e.g. disability types and behaviors of youngsters) and on the challenges, rewards and learning outcome the students experienced.

The studies on APA practicum that we have been able to locate are all set in the PETE context. With the exception of the work of Connolly (1994) and Hodge et al. (2003), these studies have investigated the impact of practicum experiences on students’ attitudes towards teaching children with disabilities. However, there is a need for more research driven knowledge about the content, quality and processes of students’ learning in practicum. Therefore, the aim of our study was to explore APA students’ learning in and through practicum. More specifically, our research questions were a) what do APA students learn from their practicum experiences? b) How can their learning be facilitated?

Theoretical Framework

John Dewey’s educational theory (Dewey, 1910; 1938), in particular his concept of reflective thinking provides the framework that has guided the action research process. In How we think, Dewey (1910) pointed out that there are different ways of thinking, but in order to develop educational experiences, thinking must be of a systematic and analytical form that he conceived of as reflective thinking. Rodgers (2002) explains Dewey’s concept of reflective thinking as a four-stage process:

(i) Presence to experience: Thinking starts from a problematic situation in which our habitual way of dealing with the world breaks down and produces an experience of perplexity. This means that the starting point for reflective thinking is that one is present-minded so that one is able to note or perceive what goes on in one’s environment. According to Dewey, therefore, an experience is not something that happens to an individual – it must be taken.
(ii) Description of experience: Once a problematic situation has been noted, the next step is a distancing of the problem by way of carefully describing it. It is crucial that in this early stage the experience is described, not explained. Dewey was careful to point out that a common mistake in thinking is to jump to conclusions too early. Thus, reflective thinking essentially involves a careful consideration of the problematic situation the learner faces.

(iii) Analysis of experience: Rodgers (2002) describes this phase as “a series of dry runs through the problem/question and its various conclusions” (p. 854). This process involves imagination, where the learner considers how a similar situation could be solved in the future. The aim of analyzing one’s experiences is to produce hypotheses and suggestions for future action. In this sense, reflective thinking is similar to the scientific process of deriving hypotheses from theories.

(iv) Intelligent action: According to Rodgers (2002), many of those who write about reflection and reflective thinking do not include this final stage. Simply learning by doing without any reflection falls short of Dewey’s original intention with the term. Similarly, reflective thinking that does not lead to action is irresponsible. For Dewey (1938), the principle of continuity was absolutely vital: The object of students’ reflections should ideally be their own, concrete experiences of problematic situations, and the students must test the outcome of the reflective thinking process in similar situations.

Reflective thinking is therefore a process of noticing and describing perplexing experiences, imagining other possible ways of handling the situation, and finally testing the consequences obtained from the analytical phase in actual practice. There must be a cyclical continuity between experience and reflection in a sense where these two aspects of inquiry cannot be entirely separated from one another (Rodgers, 2002).

In the educational literature, the concept reflection is used in a myriad of ways, and as a consequence it has been argued that it risks losing its explanatory function (Fendler, 2003). Wackerhausen (2008) has developed a so-called anatomy of reflection that he proposes as a schema underlying all forms of reflection. This anatomy of reflection suggests that when we reflect, we always reflect on a specific object, with certain conceptual tools, from given interests and values within a specific context. In terms of APA practicum, the specific object of reflection could for instance be an incident involving the student herself and the person she has worked with. This incident can be reflected on with the aid of various conceptual and theoretical resources, such as coping, empowerment, mastery or motivation. The student who reflects can do so from different value interest, for instance “the aim of APA is to encourage a healthy lifestyle” or “the aim of my professional practice is to provide a dignified service”. Finally, the context of reflection is important, because different contexts constrain the reflective process in different ways. For example, there is probably a large difference between students’ reflections that are done in the context of a journal which is part of a course requirement, as compared to reflections on the same topic in the context of a late night evening at the pub with their study buddies.

In this project, Dewey’s theory of educational experiences and reflective thinking served as a framework for the research project we have done. In particular, Dewey’s theory served as a foundation for the action research process. Wackerhausen’s schema is a useful supplement to Dewey’s theory of reflective thinking in particular for the purpose of analyzing the empirical material. With the aid of Wackerhausen we were able to inquire into the students’ practicum learning by investigating what they reflected on (i.e the knowledge objects), what they reflect with (i.e. the knowledge tools), and what they reflect from (i.e. the knowledge interests).
Practicum in APA

Method

The present study was designed as an action research project. Action research comes in many shapes and forms, but a common denominator is its cyclical and non-linear nature, involving continuous processes of “planning, acting, observing and reflecting on changes” (Noffke, 1995, p. 2). Emerging from the work of the social-psychologist Kurt Lewin in the 1930s, action research has been “transformed from a method by which practitioners applied social scientific theories into a method which allowed practitioners to assess the practical adequacy of their own tacit theories ‘in action’” (Carr, 2006, p. 424). That is, action research is a methodology which is particularly well suited for investigating educational change processes in contexts where the investigator plays a part. The way action research was employed in this study was that the first author worked closely with the students in examining their practicum experiences in order to find better ways of facilitating the learning outcome. This process is described schematically in figure 1 and table 1 below.

Participants

A cohort of students in a one year APA program participated in the study. The group of students consisted of 19 participants, 4 male and 15 female, aged between 22 and 42. With two exceptions, the students had little experience with disability prior to the program. The exceptions were one student who had a disability and one was parent to a child with a disability. Upon entering the program, five of the students held a Bachelor degree in Physical education, 12 held a Bachelor degree in sport sciences with a specialization in physical activity and health, and two students held a Bachelor degree from health sciences (one was an occupational therapist, the other a physical therapist). The first author, who was involved in the action research process, is a male university lecturer holding a Ph.D. in sport sciences. At the time of study he was in charge of the APA program being studied. The second author is a female university lecturer, holding a Ph.D in health sciences. During the course of this research project she began lecturing in the program.

Research context. The program being studied has a pedagogical approach to APA, where students are encouraged to take an abilities-based approach to APA (Emes, Longmuir, & Downs, 2002). This means that the students’ learning outcomes are centered on processes of adaptive teaching and learning of various movement activities in different settings². 10 of the 60 ECTS (European Credit Transfer System, which is a system where one full year’s study is equivalent to 60 ECTS) were devoted to practicum learning. This means that the students participated in practicum between 45 and 50 days throughout the year. In addition to the actual practica, the 10 ECTS also included preparation for practicum as well as various forms of post-practicum work on campus, such as writing journals and presenting practicum experiences to the class.

The practicum was divided into four periods, where the first two took place at a rehabilitation center. The third practicum was at a one week winter sport camp for children where the students live in cabins with participants. The fourth period was at various institutions working with mental health. These four periods were spread out over the academic year, with the first period starting three weeks into the academic year. The last practicum finished three to four weeks before the program ends.

Procedure and data Generation

Generation of data was interwoven with the action research cycles, which were organized around the four practicum periods (see table 1). That is, prior to the first practicum as well as between the ensuing practicum periods, the first author worked closely with the students to
inquire into how their practicum learning could be facilitated. This work involved group conversations with the students and closely monitoring the content of the reflective journals that the students submitted after each practicum. In addition, in order to question and test his “tacit theories of action” (Carr, 2006, p. 424), literature studies and continuous examinations of beliefs and practices were undertaken. This is in line with Dewey’s theory of reflective thinking which requires that the consequences of reflective thinking are tested in practice.

The data material, which was generated in this process, consists of three main data sources. First, as an action researcher, the first author kept reflexive field notes from the entire process. These notes were taken after regular coursework, conversations (formal and informal) with students, and at other times when the process was reflected on. Second, the material involves the reflective journals (in total 76 journals, each about 2500 words) that the students were required to submit as a part of the course evaluation. For each journal, the students were given a specific task that they had to complete in order to pass.

Third, one focus group interview (Malterud, 2012) was conducted after graduation. Focus group interviews allow for a moderated conversation between research participants and have the potential for a variety of viewpoints on the discussion topics to emerge (Kvale & Brinkmann, 2009). All of the 19 students were invited to participate in the focus group, and 8 (3 male and 5 female) volunteered to participate. The interview was moderated by an experienced researcher who had neither been involved in the action research process nor in any parts of the educational program. The moderator used an interview guide developed in cooperation with the first-author. It was developed on the basis of literature about reflective practice and questions that were asked were for example “what are the most important issues you have learned this year?” and “what are your experiences with how practicum has been organized?”. Later, the interview was transcribed verbatim.

The study was given ethical approval by the national social science data services. All students signed informed consent letters prior to the on-set of the study, where they agreed to participate in the study provided that they were secured anonymity. The students were also reassured that they participated voluntarily and that they could at any point withdraw from the study without any consequences. In order to avoid the risk of the research interfering with the evaluation of the reflective journals (pass/fail), the students submitted the reflective journals anonymously. This was done through a process where the exam office assigned a number to each student that was instead of their name on the submission.

**Data analysis**

The analysis of data took part in two steps. Inherent to the action research design, with the cycles of planning, acting, observing, and reflecting, data were at this stage generated and analyzed simultaneously (McNiff, 2013). As suggested by figure 1, during the action research process the first author read all reflective journals, and undertook a variety of research activities (see table 1). On the basis of this on-going analysis, plans for the next action cycle were made. In this sense, this part of the analyses is not so much about sorting the notes, making categories or assigning codes, as it is a process of experiencing, reflecting and seeing pedagogically (Fangen, 2010; van Manen, 1990).

* Insert figure 1 here *

When the academic year ended, the second author was included in the project in order to contribute to a more systematic analysis of the material. For that purpose we analyzed the focus group interview and 24 reflective journals (that is, six randomly chosen journals from each of the four practicum period). We decided that this was a manageable amount to start with, and found that data saturation (Kvale & Brinkmann, 2009) was reached when these
journals were analyzed. This assessment was based on the perception that no new themes emerged towards the end of this phase.

The analysis of the reflective journals and the focus group interview can be described as abductive (Fangen, 2010), i.e. a process where a joint discussion of theory and empirical material guided us in the analytical process. In concrete terms, this meant that in the first stage we did a theoretical coding using Wackerhausen’s framework with knowledge objects, knowledge tools and knowledge resources as categories. Next, we developed categories that emerged from our discussions of the theoretical categories (i.e. what we below present as “Paradoxes in reflections”). The final stage of analysis has been the writing of the text that follows, where we have aimed to provide a story which answers the research questions outlined above. Throughout this processes we continuously swung between joint discussions and independent reading of the material in order to check for (in-)consistencies of the categories we developed.

**Trustworthiness.**

Several measures have been implemented in order to ensure that the research reported here is credible and trustworthy (Brantlinger, Jimenez, Klinger, Pugach, & Richardson, 2005). Triangulation of data sources and investigators has been employed. We have used varied data sources such as focus group interview, reflective journals and participant observation. In the final analysis of the interview and a selection of journals, a second researcher participated. The second author acted as an outsider who could pose questions to issues that the first author took for granted. This reduced the chances of unwanted bias, in particular due to the close relationship the first author had to study program and the action research process. In addition, throughout the process of analyzing the material we have also presented tentative analysis to colleagues and received feedback that has been put into the analyses. Research reflexivity has been an integral part of the whole process. Indeed, increasing reflexivity is an aim of action research (Carr, 2006). An audit trail was kept to document the actions and reflections of the first author during the action research process. Members checking is recommended in order to increase trustworthiness of qualitative studies (Brantlinger et al., 2005). As a part of the action research process, the students were used as partners in reflection. Constantly checking whether the first authors’ plans and thoughts were in alignment with the students’ experiences was an important part of developing his reflexive notes. This was done through group discussions the first author held with the students where we together reflected on possible improvements in the way we worked with the students’ practicum experiences.

Qualitative research should be transferable (Patton, 2002). In our concrete case, this means that the results we present below should be relevant to practitioners in other, similar contexts. Even if we study a particular program in a specific educational context, our contention is that many of the questions our participants struggled with and reflected on can be found in other APA / APE – programs (e.g. reflections connected to issues concerning disability).

**Findings**

The findings from this study will be presented and discussed under three topics that represent how our analysis of the data material unfolded. First, we present the analysis of the students’ reflections connected to their practicum learning. Based on this, we will go on to discuss two paradoxes that arose in the analysis, which both shed light on issues that are important both for students and lecturers to consider when developing practicum learning. Finally, we present our reflections on how practicum learning in APA can be facilitated.
What Students Reflect On, With and From.

In this section, we present the theoretically driven analyses, where we have closely followed Wackerhausen’s (2008) framework for reflection. The context for reflection (i.e. the within-dimension) is given in the sense that all reflections took place within the educational program the students attended. More specifically, the reflections were expressed through the reflective journals the students submitted, as well as oral presentations and discussions based on the students’ practicum experiences. The findings are discussed with reference to the knowledge objects, the knowledge resources, and the knowledge interest in the students’ reflections. These three aspects are directly related to Wackerhausen’s on, with, and from dimensions.

The knowledge object. In order to facilitate the chosen analysis, the knowledge object was divided into three interrelated parts, namely the students, the participants, and the subject matter. These three elements and their relations are generally taken to be the constitutive parts of any educational encounter (Gallagher, 1992).

When the students reflect on themselves, they express their joy about getting to do a meaningful job, but also doubt and insecurity connected to this job. More specifically, we can divide the reflections they had on themselves as oriented towards traits they have, towards abilities they have or want to have, and towards knowledge they have acquired. First, the traits they find themselves to have are expressed through notions such as “I am afraid of making mistakes”, “I like to be in control”, “I am a shy person”, “I am able to create ease and security”. Second, when the students reflected on themselves in terms of abilities they possess, they made statements like “I like to lead others”, “I like to teach”, “This is something I must become better at”, or “I solve difficult situations with humor”. Through these reflections, they express both what they think they are already good at, and which aspects of themselves they need to develop. Third, and related to this, are self-reflections on learning and knowledge they experience through practicum: “I am a person who learns best by doing things myself” or “To have my own prejudices disproven is embarrassing, and that has happened several times”.

These examples of statements from the reflective journals indicate that and how students reflected on themselves as learners and budding practitioners during and after practicum. As such, the reflective journals provide a window into who they are and how they see themselves in the practicum setting. However, the reflections were not only about themselves in isolation. More often than not, when they reflected on themselves it was in relation to the participants, the subject matter or both. An example of this is found in this quote:

A negative trait [with me] could be that I don’t really show who I am and what I mean.

As a pedagogue, I believe it is important to show who one is as a person…. I believe participants need to feel a type of closeness to the pedagogue in order to open up. (RJ#2-A3)

Thus, the students reflected both on themselves and on the relations they were involved in during practicum.

From the reflective journals we have analyzed, the subject matter of the program was encapsulated by what the students believe their future professional work looks like. In the students’ reflections, the subject matter of the program consisted of learning to find proper activities and offering adaptations and choices for the participants. Also, the students found it important to inspire others to experience activities as joyful:

Being a pedagogue is for me to be someone who together with the participant finds activities that suits the individual. A big portion of the job is to find out how to adapt all kinds of activities, so that the participant can have as many options to choose from as possible… As a pedagogue, one must be a leader, motivator, role model, a source of
knowledge and often also a friend. I have seen that being a pedagogue is about much more than just planning and adapting activities. (RJ#2-B)

Finally, the knowledge object also includes the people they worked with in practicum. Since a part of the educational program is to learn about disability, it is not surprising that this turned out to be an important part of what the students reflected on when they thought about the participants. Previous experiences with disability among the students varied, but for most of the students, disability was a rather unfamiliar knowledge object. As indicated by statements like “You can easily become scared when given the responsibility for such a boy [with severe CP]” (RJ#1-C), the students go to their first practicum with an insecure feeling of being afraid of making mistakes and of not having what they believed was needed to work with people with impairments.

The reflective journals from the various stages of the program show a change in their reflections on disability: “the most important thing I have learned through the program is to see opportunities instead of limitations” (RJ#4-C). Indeed, it appears from our analysis of the reflective journals that students’ reflections on disability develop, in the sense that they become able to notice their own pre-held notions about what disability is and what people with impairments can and cannot do:

I have learned to see people with disabilities in a new way. They are resourceful and do not want to be pitied. The people I have met, young and old, have disproven my thoughts and opened my eyes to all the possibilities out there (RJ#4-C)

The knowledge resources. The term knowledge resource refers to the tools students use to reflect with. These tools can be theories or specific concepts that are more or less explicitly referred to in the reflections. Similar to what Hodge et al. (2003) found, the students in our study were concerned with didactics for adaptations: “I have acquired a larger activity bank, and learned how activities can be adapted through small changes… in space, time, rules and so on” (RJ#2-B). That is, when the subject matter of the program was the object of reflection, the students frequently reflected with concepts from didactics. The students entered the first practicum with a somewhat technical approach to get as many new ideas for activities and adaptations as possible. In the final journals, however, it was underscored that adaptations are not primarily something that can be planned in advance, but that the real challenge with pedagogical work in APA is to be able to provide good adaptations during activities (i.e. adaptive rather than adapted physical activity). Whereas one student wrote that “My goal was to develop my activity-bank…, but I have also learned that it is my own creativity that restricts what is possible to do” (RJ#4), another put it this way: “being able to adapt during lessons… either by going to plan B or C or simply take things as they come” (RJ#4-D).

Motivation and mastery were recurrent themes in the reflective journals. Indeed, providing participants with mastery experiences in order to create motivation for future participation in physical activities appeared as a central concern for the students:

What I want to say is that to get mastery experiences in activity, and feel that one is capable, in spite of the impairment, is decisive in order to find the joy of participating in physical activities. It is my job as a pedagogue to give people… the opportunity to experience mastery, and it is a good experience for me when they get that feeling (RJ#2-E)

Ideas like the one expressed here were found in the reflective journals from all the four periods of practicum. This also came through in the interview: «Like with motivational theories and stuff like that is easy to understand… how to apply in practice” (Interview). That is, when they reflect on themselves and the work they will be doing in the future, concepts and ideas from psychology of exercise and sport were pre-dominant.
The students frequently reflected on disability as a knowledge object. During the educational program, the students were taught about different perspectives on disability, i.e. as individual difference, as a medical construct, and as lived experience. It appears from our analysis that how the students reflect on disability changes throughout the course of the program, partly due to meeting people with disability in their practicum, but also from meeting different theoretical perspectives. Whereas the first quote concerning disability as a knowledge object presented above (i.e. the student who was afraid of making mistakes) is driven by a medical understanding of disability, the journals reveal a different understanding of disability towards the end of the program, such as expressed here: “people with impairments are just like the rest of us and just as different as everyone else. It is not a category that you can put someone in and believe you know anything about that person” (RJ#4-D). This reflection on disability is done with resources from an understanding of disability as difference. However, our analysis of the material does not suggest that the students leave the medical model of disability totally, but they seem to be in a position where they can use different ways of conceptualizing disability as knowledge object.

When they reflect on the participants, they do not just see these people as people with disabilities. Even if the students reflect on disability as a knowledge object, they do not objectify the participants by reducing them to their disability. Rather, when the students reflect on their pedagogical encounters with the participants, they are concerned with treating people as subjects: “It is the participant who is the most important person, who always must be in focus, and we have to treat people as subjects with their own opinions, thoughts, experiences, and so on.” (RJ#2-B). Implicit in this quote is knowledge resources from van Manen’s theories and concepts tact and phenomenological pedagogy (van Manen, 1993), which the students met before the second practicum. More explicitly, one of the students wrote that “tact can be described as a sensitive awareness [enabling me] to interpret and act in a good way when I work with others” (RJ#2-A).

By highlighting the theoretical and conceptual resources the students reflect with, it is clear that the students through the year pick up and make use of theories and concept they are presented with. There is of course nothing sensational or surprising about this; we should not expect anything less than students being able to reflect with the concepts and theories they meet in their courses. The point we want to make, however, is that the consequence of this is that APA-lecturers must be mindful about the specific perspective students meet. If we mean that APA should move away from a medical model of disability (e.g. Emes et al., 2002), the consequence is that the students must meet other perspectives on disability in their courses.

The knowledge interest. Probably the clearest and most unequivocal finding in the study is that the main interest and value the students reflect from is to create, promote and adapt for enjoyable participation in physical activities. After every practicum period there were students who wrote about the importance and value of experiencing movement activities as joyful, as something that gives good experiences, as expressed by this student:

I like to adapt activities and help people to do things they find fun. Sometimes they might not even have thought that it was possible to be active in such a way. To be physically active is something I am passionate about, and therefore I really like being part of helping others to have the opportunity to be physically active. (RJ#2-B)

First, as this quote illustrates we find that the students emphasize the value of being physically active, not primarily because it is good for health even if this is also a value sometimes referred to. Instead, it appears to us that the primary values assigned to physical activity participation in the journals are enjoyment and positive movement experiences. This is clearly related to didactics, motivation and mastery as knowledge resources: the rationale employed is that by adapting activities so that people experience mastery, they will also
Paradoxes in the Reflections – Potentials for Learning

In this section we will present our interpretation of two paradoxes we found in the data material. More specifically, we look into the challenging relationship between reflecting from and on own values, and the tension between the practicum as a valued experience of reality, which sometimes become too real and too difficult to handle.

Reflecting from and on own values. The students assigned much value to being physically active and having enjoyable experiences of being in movement. We also pointed out that this value seems to come from themselves and their own personal experiences. This creates an interesting paradox, because during the action research process the students were encouraged to reflect on their own experiences, but it was found that they were very reluctant to do so. Even though the program required students to submit the journals we have analyzed, this was not something they all gladly did. At times there was considerable resistance towards writing about their own experiences. This came to expression through students’ describing the reflective work as “pure navel gazing” or, as another student wrote in the introduction to a journal: “I write subjectively and only in relation to my own experiences” (RJ#1-B). We interpret this to mean that the student is making a disclaimer about the value of what he/she writes about: it is merely subjective. The paradox that this creates it that the students willingly reflect from their own values and interest, but shy away from reflecting on these values.

The picture here is not either/or; there are degrees and nuances in the students’ willingness to reflect on themselves, but we find that it is a challenge in our work as educators to help the students realize that they have a perspective, that they indeed have some values that they bring with them to the table, so to speak. For us, this presents a core challenge when it comes to developing the students into reflective practitioners. The challenge is that from any given value-perspective one can only make sense of certain aspects of the object of reflection. (Consider for instance the literal meaning of perspective as a vantage point, as a place from which an object is seen. This means that the same object may look different from different perspectives.) A perspective affords us the possibility to see, but it bars us from seeing everything at once.

It is therefore crucial that students understand that the value-perspective they hold and reflect from influences not only their reflections, but also their actions as pedagogues. More concretely; it is when students are able to understand that their values of physical activity guides the way they make sense of adapted physical activity that they become reflective practitioners who are able to take the perspectives of the people they work with.

How real should reality be? When asked to reflect on how they had learned what they considered the most important lessons during the academic year almost everyone referred to practicum as crucial: “We can read until our eyes bleed about diagnoses and theory, but it does not become real until we have met them [participants] in practicum” (Interview), or “it is
these weeks of practicum that has contributed the most to the knowledge I take with me from the program. It is really important to be allowed to test oneself in practice” (RJ#4-E).

The great value assigned to practicum is not surprising, and is also consistent with findings from other studies of practicum (Standal, Mordal Moen & Moe, 2014; Velija, Capel, Katene, & Hayes, 2008). We also find, however, instances where the students experienced reality as “too much” in the sense that there were situations that they found difficult to handle. Examples of this are when they had difficulties finding their role, such as when they tried to strike the right balance between being a leader and a friend in their work with children. In addition, being quite young and working with adults twice or three times their age, students found it difficult to have the authority they thought necessary to be good professionals. Even if these two examples were troublesome for students, they were also productive in sense that they were instances of problematic situations (Dewey, 1938) that had the potential to increase their understanding of who they are, and what role they should play when they work as pedagogues.

Another problem the students faced was when their efforts at stimulating positive movement experiences were not met with excitement among the participants. Students reflected on situations in which people did not want to take part in the activities they offered, and how this affected them, for instance: “it was difficult to be really engaged and motivated, which probably was caused by the feeling of getting little response from the kids” (RJ#2-C).

A statement like this can be interpreted critically to imply that the student transfers the responsibility to the participants: “they are not motivated and that affects my motivation to work with them”, but it can also be seen as an expression of an intersubjective relationship through which the student is becoming aware of how s/he is affected by the responses s/he receives on her/his efforts.

The problem that seemingly caused the students most discomfort, however, was when the reality of practicum transgressed private and sensitive issues:

It can be really hard to meet people in difficult situations. Some of the participants I have met and worked closely with, had little time left to live, were suicidal, had social anxiety or had other problems that made their daily life difficult. It is difficult to see other people having such problems. I have often thought about these people after getting home from practicum (RJ#2-B).

Other students reported incidents where jokes turned into unwanted sexual attention, such as comments about their bodies.

One of the participants has given quite a lot of sleazy comments to female students. It started with humor, complaining that he felt insulted by having a male assistant…. Gradually, it developed into being more and more uncomfortable. He has made comments about students’ breasts, questions about mouth-to-mouth resuscitation… It wasn’t funny anymore, but creepy. It is difficult to [tell him] that all by myself, so we told the professional team… it was good to know that the team knew and could pay attention to situations and perhaps take action if necessary (RJ#2-F).

This quote is indicative of a strategy some students opted for when reality got too difficult: They wanted the professional team to take over the problem. The paradox we see here is that between the value assigned to the reality of practicum, and that the students seemed to want to escape from reality when it became problematic and difficult. But, it also tells us that leaving the students in practicum without appropriate support probably is not conducive for their learning. It reminds us about the ethical responsibility we have as educators when we send young students to contexts where they can experience sexual harassment, pressure to drink alcohol or other forms of personal transgressions. Finally, it tells us that the support and supervision they receive during practicum must also be directed towards broader issues than the straight forward practicalities of APA.
Practicum in APA

Reflections on Facilitating Students’ Learning

In this section, we will present our reflections on how we can facilitate the students’ practicum learning. For the sake of clarity, it is important to point out that by practicum learning, we do not only intend the learning that takes place while the students are in practicum, but more broadly the learning that results as a consequence of students’ experiences in practicum and through reflective work on those experiences both during and after practicum. Three central issues that have emerged as relevant for how we facilitate students’ practicum learning will be highlighted.

Developing contexts for reflections. The context of reflection is one of the four elements in Wackerhausen’s (2008) structural anatomy for reflection. The students in the program we have researched took part in different contexts of reflection during their practicum periods. They were for instance involved in daily supervision with professional staff members, they reported that they informally discussed their practicum experiences with peers, and after the practicum they made oral presentation to the class about how their practicum had been. The most formal context of reflection in the program was the written reflections they had to submit as part of passing the course. These reflective journals are formal in the sense that they were mandatory and evaluated as part of passing the course. Inspired by Wackerhausen (2008), one might assume that developing the contexts of reflections that the students take part in, can be one way of facilitating their practicum learning.

One of the first things that was done when the project was initiated was to inquire into students’ experiences with the use of log books and reflective journals in prior study programs they had been enrolled in. Almost all of the students said they had been evaluated through the use of written reflections, but the variability in how this had been done was large. The prompts (or even the lack of specific prompts) given for the task they had received and how they experienced the requirement to use theory in their reflections varied greatly. Thus, it became important to consider the contexts within which students do their reflections in practicum. The main measure that was implemented was the establishment of students’ reflection groups during practicum. This was a group consisting of 4-5 students who were instructed to meet once a week during a 4 weeks long practicum (2nd practicum period). In order to ensure that this happened – but more importantly to find out what the students’ reflected on in such a context – they were instructed to take minutes from these meetings. These minutes were submitted as a part of the reflective journal.

From our analysis of the reflective journals it appears that the students took advantage of this context for reflection. For instance, several of the quotes presented above come from such minutes. Thus, we would suggest that in addition to the practicalities of adapting physical activities, peer groups provided a context for reflection on issues that went beyond these practicalities. The situation referred to above about sexual harassment came up in a peer group. As a consequence of this, we will in the future also implement the use of reflection groups that are moderated by professionals from the institution in which the students have their practicum. Thus, one outcome of the action research process is that we need to have a nuanced understanding of precisely how different contexts of reflection contribute to the students’ learning outcome.

Creating progression in students’ reflections. In Dewey’s understanding of reflective thinking, the concept of inquiry is central (Dewey, 1938). Another relevant feature of Dewey’s educational philosophy is his concept of continuity, which means that one’s experience in a given situation is an outcome of the interaction between one’s past experiences
and the present situation. Expanding on the previous section, we will now describe an example of how monitoring students’ reflections enabled progression and continuity in students’ learning.

One issue that the students struggled with was the difficulties in being involved in helping relations: How much help to give and how to give this help? When this topic came up again after their second practicum period, it was decided that the topic of the next reflective journal was going to be “help”. The students were given a lecture on the topic, and for their reflective journal, two research articles about help were provided (Goodwin, 2001; Goodwin, 2008). The intention with this was to help the students in their effort to understand themselves as helpers and the potential effects that their helping behaviors could have on the people they worked with. One of the students mentioned this in the interview:

[The lecturerer] has been able to pick up the essence of issues that has been challenging for a majority of us. Help has been one topic – how much to help others?... It was a progression and structure, a kind of direction further from what we already had written. In the third round we suddenly got two scientific articles about help, so I feel that have got some new perspectives on myself in the role as helper because of the reflective journal (Interview).

The point is not that the concept of help should be a part of all APA students’ practicum learning. Rather, the point is that when help was added as a topic for a reflective journal, it was because it was noted the students struggled with this topic. The effort that was made was done in order to create progression in their development as practitioners, and it was an effort to create continuity in their experiences (Dewey, 1938). As such, this is an example of how the theoretical perspective of Dewey informed the action research process.

**Integration of theory and practice.** One reason why practicum is used in APA programs is that it provides a context where students can apply theory to practice and test the skills and knowledge acquired in their courses (Emes & Velde, 2005). On a critical note, this can be read as if there is or should be only a form of ‘one-way traffic’ from theory into practice. Through the action research process, it became clear that more efforts needed to be taken in order to reverse this relationship. That is, not only is there a need to put theory into practice, but practice must also be put into theory. In other words: it became clear that it was absolutely vital to draw on students’ experiences from practicum during lectures where theoretical perspectives were presented.

The idea of the relationship between theory and practice as one-way traffic is of course a metaphor. Another metaphor for the relationship between theory and practice is that of a gap. Metaphors are more than figures of speech. They are also means for making sense of the world we act in. As Lakoff & Johnson (2008) point out: metaphors are “pervasive… in thought and action” (p. 4). When the guiding metaphor for the relationship between theory and practice is a gap, then the metaphorical solution is that of bridging. In this sense, the gap metaphor portrays theory and practice as separate places.

In our thinking on this matter, which has grown out of the action research project reported here, we have been aided by a different metaphor, namely that of balancing (Kvernbekk, 2012). In this picture, theory and practice are not un-connected. Rather, the relationship between can be characterized as unstable. This also implies that the task for educators would be to create disturbances and dis-equilibrium in the students: To draw them out of the comfort of being balanced, but not more so than to a position where it is possible for them to regain equilibrium. This also means that theory should not (only) be applied in practicum. Theory must also be understood as a perspective through which students can make sense of practicum. In addition, theory can be a critical corrective to the practicum students meet, something that makes them think twice about the practices they take part in.
Limitations of the study

Action research is a methodology which is not much used in APA. As argued elsewhere (Standal, 2014), there is thus a potential for using action research to facilitate change in APA contexts. Some limitations with the methodology as it is applied here is worth mentioning. First of all, the first author was both the action researcher as well as the practitioner educating APA students. Thus, one might ask what the difference between critically reflecting on one’s educational practice (which is nothing less than one should expect from university lecturers) and action research as employed in this study? The key difference is the systematic way it was worked with generating and analyzing data material. Despite this, it is common in action research that the researcher is an outsider to the practice one aims to change (Carr, 2006). The use of an additional researcher who could closely follow the process would have been beneficial to this study.

Also, action research is a dynamic and on-going process. Due to the way generation and analysis of data were interwoven with course activities it is at times difficult to specify in sufficient detail all relevant aspect of the process. Publishing this kind of research within the page constraint of journals means that much must be left unsaid. Despite this, we hope that enough transparency into the research process is provided.

We argued that the use of a focus group interview helped triangulate the data analysis. However, we report little data from the interview. One explanation is that the journals were found to better express the viewpoints and experiences of the students, as compared to the interview material. Also, the interview did not add as much insight to the topics as hoped. This was possibly caused by the use of an interviewer who had not been involved in the research process; a choice based on the assumption that the students would speak more freely when the interviewer did not have any stake in the process. The downside seems to be the interviewer might not have been able to probe further on issues that an insider would have picked up on. In hindsight we believe that triangulation of data sources would have been better had the interview been done by someone involved in the entire research process.

All the studies on practicum in the field of APA that we have reviewed have been done on APE-courses as part of PETE. The context of our study is wider than the traditional APE-course in PETE. Therefore, our findings might not be directly applicable to APE. For instance, we suspect that the amount of practicum our students were involved in probably exceed what is realistic in APE-courses. Despite this, we would argue that our findings are relevant for other study programs and APA-/APE-courses. For instance, considering what kind of theoretical resources students are equipped with, how course instructors can secure progression in and through practicum experiences, or how reflective work imposed on the students are organized, are all issues of general importance.

Conclusion

Much like earlier, quantitative studies of students’ learning in APA-/APE-practicum we have found that issues concerning teaching methods and didactics (Hodge, Tannehill & Kluge, 2003) and understanding of disability (Connolly, 1994) were important for the students. Hodge and co-workers (2003) found that journaling is a medium for students to address problems and think critically. Although this is important, our study suggests that there are also a number of other ways that students need to be supported in order to make sense of practicum experiences.
In this regard, our study has highlighted the importance of developing varied contexts for reflection and the importance of monitoring students’ reflections in order to create progression and continuity.

Methodologically, we have employed an action research design. The approach to action research that we have followed here is described by Carr (2006) as a practical philosophy that helps practitioners (in this case us) to assess adequacy of our own tacit theories in action. In this process we have had our own thinking about practicum learning challenged and developed. Thus, we hope to have demonstrated the value of this under-utilized methodology in the context of APA (Standal, 2014). In particular, we have tried to show that action research can both develop knowledge about an educational practice, and at the same time develop that practice itself.

A central theme in our theoretical framework is that concepts and theories guide the process of reflection. As such, concepts and theories both enable and constrain the reflections that students are able to enact in relation to their practicum experiences. However, this is not only true for students – it also pertains to researchers and educators. In this particular study Dewey’s educational philosophy has helped us see certain things in our educational practice, but it admittedly also constrains our thinking. Other theoretical frameworks would possibly have allowed issues to emerge. Therefore, our conclusion is that we urge APA-professionals to systematically analyze and reflect on the concepts and theories they reflect with as well as the values they reflect from.

Endnotes
1. By APA we understand the “cross-disciplinary body of knowledge and practice that enable professionals to interact with people experiencing difficulties with movement” (Reid, 2003, p. 20). In the following we distinguish between APA and APE in the sense that whereas the latter concerns school physical education or courses directed at physical education teacher education, the former has a broader scope and also includes sport and rehabilitation settings.
2. The main tenets of the abilities approach is that professional practice in APA should move away from a medical, expertise driven model (i.e. where the APA-professional is the expert and the participants are primarily persons with medical problems) to a model which is driven by person-centeredness and more pedagogical attitude in the sense that focus is on the “person in a learning situation” (Emes, Longmuir & Downs, 2002, p. 403). This is similar to APE (see previous note) in the sense that focus on teaching and learning, but it is broader in scope since it also involves contexts outside of school PE.
3. The abbreviation used to identify the individual reflective journal (RJ) is: #2 means that it is from the second practicum period. From all practicum periods there were 6 journals, given a letter from A to F.
4. The word didactics can have various meanings, but our understanding is that didactics is concerned with “the practice of teaching and its methods” (Amade-Escot, 2006, p. 347).
References


Malterud, K. (2012) Fokusgrupper som forskningsmetode for medisin og helsefag [Focus groups as research method for medicine and health sciences]. Oslo, Norway: Universitetsforlaget


<table>
<thead>
<tr>
<th>Time</th>
<th>Practicum sites / responsibilities</th>
<th>Research activities</th>
<th>Task for the reflective journal</th>
</tr>
</thead>
</table>
| September Practicum 1 | Students placed at a rehabilitation institution, which uses APA as their primary means of intervention. Half of the students work with children, the other half work with adults. Practicum lasts 2 weeks, and students mainly have a role as assistants and observers. The activities are mainly directed towards (re-) learning various physical activities such as swimming and biking, as well as strength and endurance training. | AR-cycle 1  
Prior to practicum:  
* Group discussion: “How do learn best from practicum experiences?”  
After practicum:  
* Students’ presentations of practicum experiences  
* Group discussions “How was your learning experience?”  
* Submission of reflective journal 1 | “Describe one or more situations or person that became important for you, or that you took a particular interest in. Discuss this situation/person from different perspectives” |
| November Practicum 2 | Students are placed for 4 weeks at the same institution as in practicum one. They are given more responsibility through supervised planning and organizing adapted physical activities. They also participate in meetings with the professional staff. | AR-cycle 2  
Prior to practicum  
* Implementation of reflections group during practicum  
After practicum:  
* Students’ presentations of practicum experiences  
* Submission of reflective journal 2 | “The journal shall consist of two parts:  
1. Conduct weekly meetings in the peer groups, where you discuss issues that you want to raise. Write minutes from these meetings and submit them as part one of the reflective journal.  
2. Begin with the question ‘how do you see yourself as a pedagogue?’ You can write what you have learned/not learned about this, what you like/dislike, what challenges you have met and so on.” |
| January Practicum 3 | Students take part in a winter sport camp for children with disabilities. The students live in cabins together with the children, usually 2-3 students with 2 children. During the days, the students follow the children around to different activities and | AR-cycle 3  
Prior to practicum:  
* Establishing help as a topic through lecture and assigning reading material  
After practicum:  
* Students’ presentations of practicum | “Describe at least one relevant situation from the camp that pertains to help. Use one or two of the articles (Goodwin, 2001; 2008) to analyze the situation(s), and on the basis of this suggest ways of handling similar situations in the future.” |
**Practicum in APA**

| March / April Practicum 4 | Students are placed at different institutions working with mental health. Some students travel to institutions where patients are staying for longer periods, others go to inner-city institutions where patients can come for the day. The students help organize different physical activities. | AR-cycle 4  
After practicum:  
* Students’ presentations of practicum experiences  
* Submission of reflective journal 4  
* Focus group interview | “You have now come to the end of the APA program. In this journal you shall reflect on the questions: 1) what have you learned during this year, and 2) what was important for this learning to take place.” |
Figure 1: Illustration of the action research cycles. The blue arrows symbolize the action research process and the dotted arrows show where data material was generated through that process.

How to facilitate students’ practicum learning?

Plan

Act & Observe

Reflect

Generating data material:
* Observations & conversations
* Reflexive field notes
* Students’ reflective journals