

ASSESSMENTS FOR LEARNING IN GRADES 1-9 IN A SPECIAL SCHOOL FOR STUDENTS WITH INTELLECTUAL DISABILITY IN SWEDEN

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Abstract

The aim of this research is to analyze teachers' and paraprofessionals' work and reflections on assessments for learning in a Swedish compulsory special school. Research has shown that assessment for learning is a powerful tool to improve student achievement. The theoretical perspectives discuss concepts such as situated learning and collaboration. The research adopted a participatory design; the researchers followed four teams, totally 20 teachers and paraprofessionals' work through video observation, discussions, feedback and lectures on assessment. The teams documented classroom teaching and assessment of students' abilities in different subject. The data in this study are based on teams' written texts. The texts are analyzed using a qualitative content analysis and contribute to research on formative assessment by including teachers as well as paraprofessionals. Results show, that professions have developed their educational philosophy and their ability to give children feedback, which will help their learning. The results also highlight the discussion between learning and caring, regarding the duties of teachers and paraprofessionals. A challenge for the teams is to unite the children's care needs with the curriculum knowledge requirements and ensure them to learn within a holistic perspective. Teaching and assessing students with extensive learning difficulties and in need of alternative communication is another challenge for the teams as well as awareness that change processes take time.

Keywords: *assessment for learning, intellectual disability, teacher, paraprofessional, special school.*

Learning and Assessment for Learning

Research on formative assessment in special schools for students with intellectual disability (ID) is an unexplored field. This research considers the general principles of assessment for learning (AfL) (Hattie, 2009; Wiliam & Leahy, 2015) in an educational context specifically for students with ID and teachers and paraprofessionals in a compulsory special school.

The European Union has advocated the use of ongoing evaluation in a practice-orientated process, but ongoing evaluations should meet certain requirements. They should be held early in the process, be in close proximity to the participants, benefit the participants, foster continuous feedback, contribute as a basis for development-oriented learning and the achievement of the various actors, study how the goals are achieved and can change over time and contribute to public debate and knowledge (Svensson & Brulin, 2011). These requirements also sum up the project process in the research reported.

Learning is often linked to an individual process within the child; however, according to modern research on teaching and learning, this conceptualization is problematic (Daniels & Heedegard, 2011). From a socio-cultural viewpoint, learning relies on the relationships and the context of the students' activities during their school day. Within this understanding of learning, children are expected to be active participants in their own learning (Fuchs & Fuchs, 1986; Wiliam & Leahy, 2015).

In working with AfL or with formative assessment, some basic assumptions arise which are intimately linked to the questions about what knowledge is and how knowledge is produced and reproduced. Black, Harrison, Lee, Marshall and Wiliam (2004) provide a definition of AfL:

An assessment activity can help learning if it provides information that teachers and their students can use as feedback in assessing themselves and one another and in modifying the teaching and learning activities in which they are engaged. Such assessment becomes "formative assessment" when the evidence is actually used to adapt the teaching work to meet learning needs. (Black et al., 2004 p. 10)

On the other hand, studies (Karvonen, Wakeman, Flowers & Moody, 2013) that include students with intellectual disabilities have shown that assessment practice is more complex since the student group is often very heterogeneous. Towles-Reeves, Kearns, Kleinert and Kleinert (2009, p. 241) declare: "as a field, alternate assessment for students with disabilities is in its infancy".

A criterion for successful work in AfL is the student's awareness and understanding of the learning goals of their education. This includes assessment that accurately reflects such learning goals (Black & Wiliam, 2006). Unfortunately, studies have shown that students are not always given such conditions (Good & Brophy, 2003), and teachers do not always have the competence to create accurate "tools" with which they can conduct the appropriate assessments for students with intellectual disability that are reliable and valid (Browder, Spooner, Algozzine, Algrim-Dezell, Flowers & Karvonen, 2003; Roach & Elliot, 2006). Towles-Reeves, Kearns, Kleinert and Kleinert (2009) carried out a study in three states in the United States that concludes that students who need a more alternative assessment can be divided into two subgroups. One with students who use symbols to communicate and have the ability to engage in social interaction and at least have some level of functional reading and math skills. The second group of students characterized by that they not yet have an acquired formal symbolic communication system; students who still need to learn to initiate, maintain and end social interaction. The two groups described in Towles-Reeves et al. (2009) are similar to the participating children in this research.

In AfL, it is crucial for students to be involved in their own learning and have knowledge about the goals that have been set in order to develop their goals in education. This implies that when a student's goals and learning process are followed accurately and supported in collaboration with the students, teachers and paraprofessionals are an essential component of the process.

In recent years, AfL, has gained a more prominent position in the daily work of preschools and elementary education, as well as in educational research (Wiliam & Leahy, 2015). Hattie (2014) found that, in general, work with AfL has a positive effect on student academic achievement. An early study from Black and Wiliam (1998) reports similar results on achievement as well as benefits from teacher awareness of the AfL concept.

International researchers such as Browder et al. (2003), Roach and Elliot (2006) and Tindal, Nese, Farley, Saven, and Elliot (2015) have reported additional challenges in working with assessments for students with more severe cognitive disabilities. However, results from studies carried out by Black and Wiliam (1998), Timperley and Alton-Lee (2008), Hattie (2009) and Wiliam and Leahy (2015) demonstrate the importance of the teacher's role in assessment for students with severe cognitive disabilities. This includes increased competence in conducting accurate assessments, in part, through self-reflection of their teaching as well

as skill development in collaboration with other teachers. Karvonen, Wakeman, Flowers and Moody (2013) study that involves 400 teachers across three states in the USA gave evidence of teachers' conviction, as well as their instructional planning processes for students with significant cognitive disabilities. Results showed that teachers who believed that the assessment process had an impact tended to have students with higher performance skills.

The research on AfL in relation to students with ID is not extensive from a Swedish perspective (Anderson, Sundman Marknäs and Östlund, 2016). Research has shown that students generally enjoy school, need greater challenges in their learning and must be involved in their learning by having a basic knowledge of what goals they are working toward (School Inspectorate, 2016). In some studies (Hedegaard-Sorensen & Tetler, 2016; Mineur, 2015; Östlund, 2012; Östlund, 2015), questions have been raised regarding the complexity of the educational context, particularly in relation to the opportunities for students to participate in school and society. Research has characterized the school context as "care-giving," and under-challenged in relation to the curriculum goals. There are several studies in Sweden on educational work in special schools (Anderson, 2002; Mineur, 2015; Szöniy, 2005; Östlund, 2012; Östlund, 2015), but few of these studies focus on issues relating to AfL.

Compulsory Schools for Students with Intellectual Disabilities in Sweden

Major changes made by the National Board of Education in the curriculum for the compulsory school for pupils with ID (Swedish National Agency for Education, 2011) indicate that teachers and paraprofessionals have identified new areas for development in the local school practice to increase the students' academic performance. The structure of the curriculum has changed and now contains different concepts and content.¹ New demands are placed on teachers and paraprofessionals, such as interpreting the new terminology of the curricula and developing new ways of assessing the students' learning. Further, a dilemma for teachers and students has arisen because the links between learning goals and knowledge requirements are not clear. The students' understanding of their learning goals and the assessment criteria are essential for positively affecting learning outcomes (Black & William, 1998; Hattie, 2014). The students' noticeable gap in understanding between their goals and assessment criteria created a risk, that the educational goals and standards would be perceived as meaningless and unclear. Transparent learning outcomes and assessment criteria allow students to be involved in their learning and achieving their goals.

The Swedish Education Act (2010:800) stipulates that all children should receive education in compulsory schools. Children are not expected to achieve the standard learning outcomes because they have an ID and have the right to receive education in special schools for pupils with ID (with their own curricula and syllabi), often locally integrated into mainstream schools. The decision made is based on a medical, psychological, social, and pedagogical assessment. Currently, approximately 9800 pupils receive their education in compulsory schools for pupils with ID, which amounts to 1% of all students between the ages of 6–16 in Sweden (Swedish National Agency for Education, 2016).

Two programs, which are based on the assessed needs of the students with ID, are available: 1) teaching subjects and 2) teaching subject areas (Swedish National Agency for Education, 2011).

1. Teaching subjects can be compared to that of mainstream schools but are adapted both in their content and by their teaching methods to be geared for pupils with mild ID.
2. For students with severe ID, 'training schools' offer subject areas such as artistic activities, communication, everyday activities, motor skills, and perception of reality. The training school consists of students with a wide variety of support needs.

Situated Learning and Collaboration

The opportunities to learn and develop connect to the process that allows the learner to fully participate in a community. Lave and Wenger (1991) describe the concept of 'situated learning', which contributes to an understanding of learning that emphasizes the learner's participation within their social context. Within a sociocultural perspective, learning is seen as a process, which is anchored in the teachers and paraprofessionals' everyday lives at school where they interact with each other and their students in various activities. This can be expressed as learning, and AfL is social and situated (Lave and Wenger, 1991). Findings in Meyers (2011), Meyers and Lester (2013) studies on alternative forms of competence development for teachers, suggest that teachers' development of new skills and knowledge that can be integrated into their own classroom practice is more successful when the competence development is performed within the context they are working in. A situated learning perspective demands that learning, documentation, and knowledge must relate to a context or an activity. Ongoing learning activities cannot be separated from the social and cultural contexts in which they take place. The teachers in Jones and Lawson's (2015) study, that was conducted on the basis of Lave and Wenger's (1991) theoretical framework, emphasized that their learning was tied to their possibility to be engaged in developing their own school context. The study shows that the teachers used the knowledge and understanding to adapt evidence-based strategies and make educational decisions, especially with regard to the attitude of students and their relationship with students with severe intellectual disability. Such an approach, as Lave and Wenger (1991) assert, also means that if teaching models cannot be "copy and paste," the models must be recreated and reflected on by the participants. The models and concepts must be tried out in relation to the school organization and the classes, and the culture and circumstances within the school. In Meyers (2011) and Meyers and Lester (2013) studies it was a factor to reach better achievement if the education was conducted in the teachers' own school organization, which led them to relate their new knowledge to their own teaching practice in a better way. This means that the school's own ability to develop the practice of AfL, must be evaluated, reflected on and discussed to create the best learning environment possible. For example, teachers and paraprofessionals within a learning community can create a common vision with common values, and this could possibly be linked to positive emotions, feeling good, and the joy of working with like-minded others. Collaboration is about meaningful relationships, and to work together in common, practical activities focused around teaching and AfL provides an opportunity to feel a sense of accomplishment. The teachers (Meyers & Lester, 2013), who participated in shared decision-making, learned answer strategies from each other that helped them solve unexpected problems and situations. They brought their prerequisites and newly acquired knowledge that they created through their collaborative efforts to the practice of their own school. This research examines how a learning community can be developed to support skill building and change in relation to the use of innovative teaching methods.

Aim and Research Questions

The aim is to analyze teachers and paraprofessionals' work and reflections in AfL during a professional development project in a special school. The analysis contributes to research on formative assessment (Jönsson, 2013; Lundahl, 2014) by including teachers and paraprofessionals working with students with ID. The analysis also contributes to a variety of results of how teachers and paraprofessionals can find ways to involve students with ID in the assessment process and thus better identify the students' learning.

Research Questions

1. What was learned by the teachers and paraprofessionals?
2. What do teachers and paraprofessionals consider as important aspects when assessing learning for students with intellectual disability?

Methodology of Research

The research of AfL in compulsory special school began as a school development project. In February 2012, a policy decision was made by the City of Malmö. The school improvement work for increased effectiveness in learners' achievements was supported, and the city offered a grant to the professionals to work with developing the education. From a pool of many applications, the compulsory special school, in focus for this research, was chosen by the city council of Malmö because of the school's detailed justification. In its application, the special school had been chosen to focus on AfL.

Participants

The participants comprise seven special need teachers and special education teachers,² one leisure-time pedagogue³ one teacher (in total, eight women and one man, who from here on will all be referred to as 'teachers'), eleven paraprofessionals (nine women and two men), and one principal (woman). The teachers have been working in their professions between 1–22 years. The paraprofessionals are trained student assistants and have 8–30 years of professional experience. Paraprofessionals play a major role in the social and academic outcomes of children with disabilities, and many children with disabilities spend much of their classroom time with paraprofessionals instead of the teacher (Brown & Chapman, 2014) and thus play an important role in the assessment process.

In total, 20 teachers and paraprofessionals working in seven classes with about 35 children from grades 1–9 were involved in the school effort. The number of adults who worked in each class relates to the extent of each child's disabilities and support needs. In classes where children had severe disabilities, the staff-to-student ratio was one-to-one. Most of the staff in these cases was paraprofessionals. In classes where children had mild or moderate disabilities, the ratio was usually one teacher and two paraprofessionals per class of 4–5 children. The recurrent discussions between the two researchers,⁴ teachers and paraprofessionals were about how they could select and define a development area that could be reasonable to implement and evaluate during the coming school year. The four teams were formed by grouping the staff by how similar their answers were when answering the following questions: In what areas would they work? What frames are available? How to document the processes? What resources are needed? How to evaluate the assessment work? These discussions resulted in four development areas, and the seven classes were organized into four teams according to the selected areas on AfL. They included the following subjects: Swedish Language, Mathematics, Natural Science, and the subject areas of Perception of Reality and Communication (see table 1).

Setting

The entire AfL learning process during three semesters (2014–2015) was characterized by reciprocity, flexibility, and continuity (Kvale & Brinkman, 2014) in informal and formal conversations between the researchers and participating teachers and paraprofessionals. The continued talks between the researchers and the teams had consequences for the teams' planning and handling of the work with AfL in the classes. In addition to collegial conversations, the

researchers lectured on the topics as assessment in general and methods used in assessments as well as supporting and giving feedback to the four teams during the process. This study adopted a participatory design (Chevalier & Buckle, 2013).

Data Collection

In line with Wiliam and Leahy (2015), these were the starting points for the teams: identifying and valuing the students' individual goals to work with, giving feedback relating to the goals, learning about how the children achieve their goals, and finally, evaluating and monitoring the learning process. Each team gradually designed strategies to implement the planned development areas depending on the choice of subject and the facilities and interests of the team. In this context, it is important to note that the processes to improve the AfL are a long-term project and will take time; in addition, they depend on the students' conditions and abilities as well as the professionals' needs and competence (Blossing, 2013). Table 1 below shows teams, students, subject, subject areas and used methods for collecting the empirical data.

Table 1. Teams, students, subjects, subject areas and used methods.

Team	Students	Subject/subject areas	Methods
Team 1: One teacher, two paraprofessionals	Special school program 1: Seven students with mild intellectual disabilities (grades 1-3)	Mathematics	Video recording and video analysis relating to the learning outcomes of the curriculum in mathematics
Team 2: Three teachers, six paraprofessionals	Special school program 2: Ten students with severe disabilities (grades 1-9)	Communication	Video feedback and individual notebooks for each student related to the learning outcomes of the curriculum in Communication.
Team 3: Three teachers, two paraprofessionals	Special school program 1-2: Thirteen students with mild and moderate intellectual disability (grades 4-9)	Swedish Language/ Communication, Natural Science/ Perception of Reality	Templates and video feedback related to the learning outcomes of the curriculum in Swedish Language and Natural Science
Team 4: Two teachers, one paraprofessional	Special school program 2: Five students with moderate intellectual disabilities (grades 1-2)	Communication	Written documentation of the work with the support of observations of the teaching and iPad and digital camera were used

Data Analysis

During the research process, it became clear that different approaches and data collection methods could be tested and evaluated. An openness to methodology and flexibility in the use of different methods is an important feature in the ongoing evaluation or research-based evaluation (Ahnberg, Lundgren, Messing & von Schantz Lundgren, 2010). The data material used in this research is based on the four teams' documentation (written texts) of their work with AfL. The texts are analyzed using a qualitative content analysis (Graneheim & Lundman, 2004). This methodology is built upon clarifications in both the terminology and the procedures

of analysis made by Alexandersson (2004), Graneheim and Lundman (2004) and Bryman (2012). The texts are read several times, reflected upon, and notes are made in the margins (Alexandersson, 1994). The manifest content analysis started (Bryman, 2011; Cohen, Manion & Morrison, 2011; Graneheim & Lundman, 2004), including meaningful units from the texts and condensed written materials (i.e., texts), were categorized and grouped together according to many themes, for example, 'new way of thinking', teaching and learning", "changing focus", "acting more passive". The units would ultimately be combined to form two overall themes: Reflections and lessons were learned by four teams and important aspects were expressed by four teams when assessing learning. Selecting meaningful units can be difficult; if they are too large, there runs the risk that they contain more than one phenomenon and the selection of too small units means the risk of material fragmentation. In both cases, important information is missing. Categorization also is a critical phase and probably the most difficult in the whole process. It is, often declared that the categories should be exhaustive and mutually exclusive (Cohen, Manion & Morrison, 2007; Graneheim & Lundman, 2004).

Ethical Considerations

There are many ethical considerations to take into account in regard to children with disabilities. This becomes especially clear when it comes to ID, where a relative or another adult acts as an agent for the child, most often when the child has limited or no verbal communication. Due to the communication difficulties of the students in the research, the staff is the primary focus during the process. Initially, all parents were informed about the planned school effort and work with AfL that would take place over three semesters. The parents signed a form by which they consented to the process and the assessment work that the teams were involved in. Children were informed but did not sign the agreement because they are minors. Further, the parents received feedback relating to their child's performance.

Credibility

A decision to use the concept of credibility, because the research was based on qualitative data was made (Bryman, 2012; Cohen, Manion & Morrison, 2007). The requirements of credibility, authenticity and transferability in the study have been taken into account. The city council of Malmö, who supported the study, required that the processes were monitored and evaluated. This means that one of the researchers followed and documented all steps in the research process. The researcher took notes during team meetings and meetings with the school's headmasters. The researchers discussed both how the process progressed, and the data collection was used by teams to carry out the assessment work in each class. One of the researchers as well documented the joint discussions. Authenticity is important in qualitative studies and the four teams were involved throughout the entire research process. Their written texts are the basis of the quotations in the research. Credibility was considered relatively high, even if subjective elements can never be ignored. The study is unique in its implementation and there is a desire for utilitarian perspective with the results. If the research content can provide knowledge and understanding of AfL it could be transferable and benefit for staff in special school for ID (Anderson, Sundman Marknäs and Östlund, 2016).

Results of Research

Reflections from discussions can be summarized as follows: The teachers and paraprofessionals discussed issues about teaching on a scientific basis, subject area assessment, the goals in the curricula, and the shift from curricula with practice content to more academic content. Additionally, the groups discussed the issue of communication for students with multiple and severe disabilities and the need for consensus and uniform language between

the teachers and paraprofessionals to find useful tools for AfL and feedback. The teachers desired participant observations in classes, tutoring, and feedback from the researchers. The staff also had expectations about finding functional tools to carry out assessments versus the heterogeneous group of children in their classes. The future of their work was expressed through considering evaluation as a natural part of their daily work as well as involving the whole staff in the AfL process.

The four teams later expressed a greater understanding of the importance of giving children time and space in the classroom and be more active in their own listening. These expressions from the teams have contributed to a better quality of teaching and that students have developed in relation to their learning outcomes. A key finding in the study has been to relate the teaching to the students' interests, to stimulate their telling and retelling.

Reflections and Lessons Learned by Four Teams

The most important results from Team 1 show that everyone is aware of the curriculum content and focusing the students' academic achievements. Throughout the staff groups, the discussions about the curriculum, learning, and assessment processes are now on a different level than they were before. The discussions on education are more in focus. Team 1 states:

The common pattern – the teacher asks the questions, some students respond, and the teacher evaluates the students' responses – needs to be replaced with a dialogic classroom. (excerpt 1, Team 1)

The teacher's role to evaluate the students' responses was replaced so that the teachers and paraprofessionals instead could become active listeners.

New Way of Thinking about Learning

The efforts on assessment had a major impact on Team 2, and the team expressed that they have developed new ways of thinking, took part in new discussions, and gained new insights. The children's individual notebooks produced by Team 2 give everyone a greater opportunity to participate in the assessments. The notes give a good indication of how different members of the team assess the students' learning and provide a good basis for further development of the AfL in the classes. Reflections from Team 2 describe this in the following way:

If different categories of the team should have the opportunity to work with each other and not next to each other, we need discussions with a clear framework, clear content, and a clear focus on teaching, the students, and assessment and learning. (excerpt 2, Team 2)

The work that Team 2 carried out shows how important it is that everyone, both teachers and paraprofessionals, are involved in the assessment. It is also highly important that everyone in the team have good knowledge of the content of the curriculum and syllabus, knowledge of pedagogy and assessment, and knowledge about how students develop their learning. Team 3 has learned:

Through an increased focus on giving students direct feedback, we have become better at assessing and seeing what the students have learned and how they evolve. It has also contributed to the more academic conversations about student learning; we express to each other what we see, and it has resulted in a good dialogue within the team. (excerpt 3, Team 3)

Learning and Teaching are Connected to Each Other

In a good learning environment, learning and teaching connect to each other to optimize the students' opportunities to achieve their educational goals. Team 3 states:

If learning and teaching are not connected, there is a risk that students will not reach the intended educational objectives. (excerpt 4, Team 3)

To make visible where students are in the learning process and use this information to adapt the teaching to the students' needs, it is essential to support their learning in the best way. This means that teachers need to have knowledge of the student's learning, what lies behind the students' achievements, and the way the students themselves need to be aware of their learning. Team 3 writes:

It is important to have the opportunity to [conduct] regular comprehensive discussions with experienced personnel, but it is equally important to sit down with the team and discuss the current students and their learning processes. (excerpt 5, Team 3)

Team 4 saw the advantages of their own learning process over time and describe what they learned from their participation:

Through changing how we talk with students about their learning and by giving the students more time to express themselves, we developed a more dialogical approach in the work with assessment for learning. (excerpt 6, Team 4)

Team 4 reflects on how they changed their role by actively listening to the children and by giving them the time they need to express themselves. Through working with AfL in this class, the feedback was embedded in dialogues developed through the team's new approach. Team 4 writes:

The ongoing talks in the team have contributed to both mutual trust and respect for each other's professions that increased their understanding of regulatory documents, learning, assessment, and knowledge. (excerpt 7, Team 4)

The Students' Effect on Teachers

Team 1 have clearly improved their teaching strategies by not only having developed their way of asking the children questions but also informing them about their learning. The team states:

Working with formative assessment in a systematic way complements the work of Individual Educational Plans (IEP) and includes the students in their learning. (excerpt 8, Team 1)

Through a sharper focus on the importance of giving feedback to the students, team 4 tutored them during the process and provided clear feedback directly to them. Through an increased focus on giving students' feedback, they have become better at assessing and seeing what students have learned and how their learning has progressed. It has also contributed to more academic conversations about student learning, which appear in the reflections from Team 4:

We have a good dialogue among us. The development has increased the trust in the team and has developed our professions. (excerpt 9, Team 4)

Team 1 thought that by letting the children answer the questions, What have you learned? and How did you learn it?, they would eventually catch sight of their learning. This proved to be too difficult. These were issues that were simply too large and abstract for the children in this class; instead, the team reflected on the lessons. By allowing students to share and put into words what they had done during the lesson, the teacher and paraprofessionals in Team 1 reflected in the following way:

The goal was to get better at asking the students questions that would open up for their own thoughts and words. This was difficult, but with the help of video sequences from the reflection sessions, we got good feedback on our work as leaders of the conversation and could also develop in our own role. (excerpt 10, Team 1)

The video sequences from the lessons in classroom made the strategies visible and clear and helped with the feedback on the children's thinking. Team 1 explains:

Video clips from the math lessons show how we explain to the students how they should solve a problem when they say that they have done something else. (excerpt 11, Team 1)

The video clips from the lessons also clarify, repeat, and reinforce math concepts such as more, as many, addition, subtraction, etc. and increase opportunities for the students to acquire a common language. In the educational context, this means that the student's abilities integrated in the learning context and the teaching effectiveness depends on the efforts of both teacher and student. Therefore, an effective classroom is a classroom characterized by high student participation. Team 3 also had benefited greatly from the video recording when the students made their oral presentations. It has also been a useful tool in the evaluation of the goal. The team has learned that this tool gives a good, clear picture of the students' skills and abilities.

Video recording is a useful tool for both students and professionals. The students can see and evaluate their capability along with a teacher, and it gives the opportunity to look at specific parts of the video clips several times to highlight what has been good and what needs to be improved. (excerpt 12, Team 3)

Team 2 describes that there is much left to be desired, especially more time for continuous discussions when the entire staff group is present. It is important that the two professional areas in compulsory special schools, that of care and knowledge/learning, can be met in line with the children and their learning needs. The team has developed in giving verbal, direct feedback to the children. All categories of staff are more likely to reconnect, validate, and visualize everything from simple communication signals to clear learning processes of the child, and in some cases, the children communications become more clear and distinct, but it is still hard to know how the children perceive themselves.

Acting More Passive in Relation to Students

However, AfL is not just about delivering information about student performance. Team 4 describes the need to include information on how the students can change their way of thinking or acting in order to achieve the learning outcomes. This type of response has shown how to produce positive effects on student achievement, motivation, and commitment to the effort. The students' social skills and peer relationships have developed during the process, and Team

4 expresses that “The students have gone from going through an adult to make contact with a peer to make contact directly with peers.” The team has discovered that students talk directly with each other and take initiative in a different way than before. The result partly relates to the team members acting more passive in relation to the students. A tangible result of the work is that Team 4 learned to give students more time to reflect throughout the day. Team 4 describes:

We have developed listening [skills], giving the students' greater opportunities to express themselves. We have become more aware of how they communicate to [the other] students what to do/work with. The formative assessment is done continuously in the everyday work and in constant interaction with students. (excerpt 13, Team 4)

Important Aspects Expressed by Four Teams when Assessing Learning

The teams' descriptions of their work in the classroom are the focus, and the challenge is to involve all students in the work of the AfL. The teams expressed that they had different challenges in the classes depending on the student group's composition and the students' abilities and needs.

Changing the Focus from Caring to Learning

Team 2 expressed that there is a lack of consensus on students learning in training school. The team members were frustrated and felt helpless and could not relate their group of students to the curriculum text. Moreover, the teachers felt that the care and needs of the students were not acknowledged in the curriculum text. Swedish National Agency for Education (2001) states that much focus has been placed on nurturing and caring for the student in special school. The nurturing is important, but it also runs the risk of preventing students from being challenged in their learning if caring is given too much importance in the classroom. The solution for Team 3 was to highlight students the learning that happened during nurturing and caring activities. Team 2 expressed a need to shift the focus from “care to students learning”.

Team 4 based their work mainly on three basic questions asked to students: 1) Where are you going? 2) Where are you now? 3) How do you proceed? The three questions gave the teams the tools to start working, and meant they could use the students' previous experience and knowledge as a starting point. The questions fall in line with the idea that all education should be designed to teach students in their proximal zone of development. Reconciling assessment for learning with IEP facilitates the daily work in the classroom. AfL could work in a natural and logical way in the students' IEPs.

Team 3 introduced a model with an AfL template for the students to use in the subject of Swedish Language and the subject area, Communication. The basic purpose of the template was to clarify to the students what they would learn in relation to a specific goal. The template also informed the children about how their task, for example, a written text or speech, would be assessed by the teachers. The first step, relating to the question, “Where are you going?” was to identify the level of knowledge each student had in the subject or subject area. After identifying the child's ability, the teacher could formulate goals that stemmed from the students' interests and cognitive level, and thus, teaching could begin that would be in line with the students' proximal zone of development. The objectives of each child, along with what would be assessed by the teacher, were described on each student's individual template. Team 3 expresses in their text:

When the students finished working with their assignment, they looked at their AfL template and reflected on whether they felt ready to give a presentation to their peers and teachers. When evaluating the students work, the team asked the students if they thought they had managed to reach the goal. (excerpt 14, Team 3)

Through the systematic and continuous work with AfL, the didactic questions of what? why? and how? help the children to recognize what and why they should learn when working within a specific lesson. Team 3 made progress in their professional development by relating the teaching to the questions and connecting the subject to the students' experience as learners. Team 3 stated:

Working with AfL has also enabled the students to become learning resources for each other. They were given the opportunity to jointly reflect on their own and their peers' learning. (excerpt 15, Team 3)

This may signal a shift in perspective – going from a teaching model that emphasized individual learning to a new concept that understands learning as social interaction. This falls in line with the theoretical view of learning that emphasizes forms of guided participation and apprenticeship.

Strategies in the Classrooms Involving the Students in Their Own Learning

The four teams focused largely on providing verbal feedback directly in the activity; feedback that did not simply give praise and say “good.” Pupils need to hear *what* is good. The students love to see themselves in photos and video clips and the team decided to use this tool in their data collection. After a number of meetings with the researchers, a clearer focus on abilities emerged which facilitates understanding and teaching in subject areas. When discussions in about concepts in curriculum and syllabi ended, it was time to start thinking about assessment for team 2. The team agreed that they lacked a method or a tool to make all the participants involved in the observation of the learning process, and to some extent, the assessment. Team 2 decided, to continually write their observations in individual books, which were divided into the five subject areas in training school.

By individually evaluating each student's learning Team 3 developed the ability to self-assess their performance and articulate in the text:

The approach has been clear to the students, who become more involved in their own work. The AfL template also serves as a good support for the entire team. When evaluating the template with the students, it emerged that the templates had been clear and concrete. Students expressed their support and the benefit of using the AfL templates. (excerpt 16, Team 4)

Discussion

The results are discussed in light of the two research questions: reflections and lessons learned by the teams, and important aspects expressed by the teams when assessing the learners' achievements. The results presented in the excerpts made the development in the educational practice visible in the studied compulsory special school. Initially, the process was characterized by uncertainty about how the teachers were expected to interpret and understand the core content, knowledge, and skills in the curriculum. The four teams' descriptions in their texts made visible how they developed and changed their teaching practice. The overall aim of the research, including a focus on student engagement in their learning, is linked to an understanding of the team's relationship with, and assessment of, student learning. Together and in collaboration with the researchers, the teams changed both their approach to student learning and their view on how children learn. In the analyzed texts written by the four teams, a shift occurred away from the norm of student learning as an individual phenomenon to a view of student learning as being regarded as a social phenomenon (e.g., excerpts 10 and 12). Teachers and paraprofessionals developed their cooperation within the team as well, and all took joint responsibility for the AfL (e.g., 6 and 7). In this context, the team development can relate to

Lave and Wenger's (1991) and Jones and Lawson's (2015) ideas of learning communities, which asserts that all team members, specifically the paraprofessionals, carry out their work with student learning in a more independent way. This finding indicates the importance of consider learning in both care and education. In other words, this means combining the profession's assignments and roles regarding perceptions of student learning. The teams' expanded collaborations show that their work provided meaningful relationships, and their joint effort in common practical activities with a focus on AfL provided opportunities to develop the assessment processes. The learning community developed the four teams' skills and changed their practice to more innovative teaching methods, which had an impact on children's learning. The teams' expanded collaboration show that their work provided meaningful relationships, and their joint effort in common practical activities with a focus on AfL provided opportunities to develop the assessment processes. One aspect contributing to the change can be connected to that all professional roles benefited from the educational work with AfL and that all expected to contribute actively with their specific expertise. As asserted by Svensson and Brulin (2011), a shared responsibility for the development emphasizes the need for evaluation to come in early in the process, provides continuous feedback, and motivates cooperation between different actors to create a development-oriented environment (e.g., excerpts 2, 9 and 13). There is a strong emphasis that learning takes place in relation to and in collaboration with others, a learning that is situated and relational. The participants also stressed the need for joint effort including other professionals and students themselves for developing their work with AfL. Similar results are recalled in studies of Meyers (2011), Meyers and Lester (2013) and Jones and Lawson (2015).

The four teams expressed that process-oriented approach of AfL led to new insights and a developed understanding of what, how, why, and when students learn, and the ways in which student learning can be represented (e.g., excerpts 1, 3, and 4). William and Leahy (2015) and Jones and Lawson (2015) highlight this and point to similar processes within their research. In the analyzed texts, it appears that discussions helped the different professions, teachers and paraprofessionals, in their work *with* each other and not alongside each other. The teams reflected that they not only developed professionally in giving clearer feedback to the children but also developed a new language to address each other in the team and give feedback within the team (e.g., excerpts 2 and 5). The classes usually consist of many adults, and to achieve success in teaching requires close and respectful cooperation characterized by responsiveness to the others in the team (Svensson & Brulin, 2011).

Both in descriptions and reflections, the participants emphasized that they became a better team and that trust in each other increased. In reconciliation, and in the results above, there are signs that their collegial learning has become visible in the four teams (Timperley, 2008). In the same way, the teams describe that the students have begun to learn from each other, have confidence and trust in each other. It is also important to highlight the paraprofessionals' role as observers, especially in connection to the AfL, where paraprofessionals are sometimes responsible for the implementation of teaching in one-to-one tutoring. From such a perspective, the assessments are an issue for teachers, as well as for the paraprofessionals, in the team (e.g., excerpt 7). In compulsory special school, paraprofessionals have an important role, which in many cases, is underestimated (Brown & Chapman, 2014). By working together with a strong focus on student achievement, the teachers can become better at finding evidence of how the students' 'skills meet the established objectives and criteria, and thus implement education and use assessment in a way that meets the students' needs. An important contribution to the development of all four teams has been the changes that were made in the way they give students feedback (William & Leahy, 2015). The increased focus on providing relevant feedback about the students' learning process and the tasks the students work with have helped the students to become more involved in their learning (e.g., excerpts 12, 14 and 15). (Browder et al., 2003; Roach & Elliot, 2006; Tindal, et al., 2015).

Limitations

The amount of time the staff had to work actively with AfL proved to be more problematic than the local school board first thought. Some reasons for this were the change of principals and different working conditions for the teachers and paraprofessionals. The result indicates that it often becomes difficult to organize joint meetings of the entire staff. This led to frustration in both professional categories. The aim of learning from each other and developing new knowledge together took longer than initially planned. There was sometimes a “sense of alienation” among the paraprofessionals because their strictly regulated working hours imposed limits on how much they could participate in joint meetings.

Concluding Remarks and Implications

In their reflections, the teams show that they view students' learning as a joint responsibility between teachers and paraprofessionals. They also show that understanding the importance of dialogue contributes to respecting and trusting each other's competence, which also is highlighted in the research of Meyers and Lester (2013), and Jones and Lawson (2015). The teams increased their awareness of the importance of dialogue for the development of teaching and learning in relation to the students' conditions. They express that they have become more aware that learning outcomes can be concretized in various ways to involve students in their learning and that feedback about student performance is important. Moreover, the teams highlighted important aspects in their work with AfL. In addition to serving as a resource for each other, systematic work with assessment for learning, combined with IEP, includes students in their learning and tries out approaches that work to visualize and confirm the students' own learning.

Capturing and discussing important issues takes time (Blossing, 2013: Meyers & Lester, 2013), and although the questions about developmental areas come from the teachers and paraprofessionals themselves, this does not mean that they will work through the process. To bring about change requires sustainable support structures that enable continuous talks and cooperation. If it is allowed to twist and turn on thoughts, there also must be awareness that implementing change takes time. The teachers and paraprofessionals must feel that the employers believe in their ability and willingness to change and develop the daily work.

Conclusions

The result has shown that development processes are not linear, take time, and depend on the conditions available and given. The research contributes knowledge of the assessment of learners attending special schools, an assessment practice that is still in its infancy and needs to be further developed through extensive studies. A challenge for the teams is to unite the learners' care needs with the curriculum knowledge requirements and ensure the learners taught within a holistic perspective. Towles-Reeves et al. (2009) research shows a similar pattern and highlights the challenge of teaching and assessing students with alternative communication and severe intellectual disability. Another challenge is to study the sustainability of a change processes. The questions below posed by Team 2:

Will the knowledge and understanding of learning processes and assessment gradually erode?
Or can we hope that this will eventually be self-evident?

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Endnotes

- 1 The reform implemented meant more space for academic content, and the requirements for students to achieve the goals have increased
- 2 In Sweden, there are two different professions, which focus on special needs education. Special education teachers work with school development, educational investigations, and guidance, whereas the main mission for special needs teachers is to support individual students and subject development.

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- 3 Leisure-time/after school pedagogues have a leading role in the afternoon center, which often is located at the school.
- 4 The third researcher had the role of following and documenting the AfL process.

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